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# STREP

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THE recent development of a specific treatment for streptococcus infections with a synthetic substance must be considered one of the most outstanding triumphs of chemotherapy—as important in its sphere as the creation of Salvarsan and Insulin. Reports on the results published both here and abroad on streptococcus infections with this new chemotherapeutic agent have aroused deep interest in medical circles. Based upon the results of this research Alba Pharmaceutical Company, Inc., is pleased to present:

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# Editorials

## ELIAS HUDSON BARTLEY

1849-1937

THE death of Professor Elias Hudson Bartley is fraught with an especial significance for this journal, for it was this distinguished man who, in 1906, founded the organ of the Associated Physicians of Long Island—he then being president of that body—which was consolidated in 1930 with the MEDICAL TIMES after about a quarter of a century of fine journalistic service. The *Long Island Medical Journal* began its life just when the *Brooklyn Medical Journal* ceased to be published, the latter publication, organ of the Medical Society of the County of Kings, having been founded in 1888. Many members of the Associated Physicians of Long Island were members of the Medical Society of the County of Kings and it has been customary to think of the two journals in question as bearing a kind of parent and child relationship to each other. The MEDICAL TIMES is not the third generation of the family, having been founded in 1872, but married into it, so to speak.

Professor Bartley was a chemist and practitioner of renown who for many years was a member of the faculty and attending staff of the Long Island College Medical School and Hospital. He was also actively identified with many other scientific and teaching institutions on Long Island and was for six years chief chemist of the Health Department in Brooklyn. For a time he was dean of the college. He was especially interested in pediatrics and held that chair in the college as well as that of chemistry and toxicology, having been one of the versatile, broad-gauged Titans of his day. His textbooks on chemistry ran into many editions and were models in that

field. He was a fellow of the American College of Physicians and active in the national societies representing his fields. As teacher, practitioner and man he met the most rigorous standards and is carried in the memories of a host of physicians with an affection and admiration reserved only for the elect of our profession.

### *In the Lull Before the Deluge*

A MILLION dollars for salary rises; a billion dollars for dividends! So it goes. Yet a fair distribution of the profits of industry would increase spending, increase production, minimize unemployment, revitalize industry at all points, and enlarge the prestige of business men while it made social palliatives such as charity and security acts, and the latter's child, compulsory health insurance, unnecessary. These principles are familiar enough to economists but not understood by many of our dumb Babbits.

The trend is toward social organization on a low plane. Remember that our manner and fashion of meeting the problems of the day is by such measures as birth control, measures which make virtues out of wretched expedients and do nothing to solve the real problems.

So the warning of the *Westchester Medical Bulletin* is logical and timely:

Above and beyond its present progressive efforts to improve the quality and availability of medical care, the organized profession will shortly face the greatest struggle in its history to preserve the economic foundations of its triumphant art and science against a proposal that is . . . one of the most tragically impractical "social welfare" projects ever conceived—compulsory health insurance.

In the old countries of Europe there has always been a tradition of fairies, trolls, gnomes, pixies and goblins. These have always been imaginative, unreal, and, of course, unhuman figures. Today, in America, we are in process of creating hordes and armies of subhuman but very real figures—the beneficiaries of social security and other forms of federal pap. The

beneficiaries of compulsory health insurance, for example, would constitute such a class of living hobgoblins, and would differ from the trolls and fairies by reason of their human link; yet they would not be thoroughly human, which is why we have called them subhuman. In the face of a society organized along such lowly lines, the charming world of the fairies of imagination would vanish. An ugly and dreadful reality would take its place. Hitherto, all men have been at least human, no matter what the set-up. A new kind of Dark Age looms, in which manhood and identity, dignity and individuality will be fractionated *ad nauseam*, with medicine hitched ignobly to the funeral car of the nation.

And all for want of a decent social order that could come into existence were it not for the crass stupidity, moral sickness and social recalcitrancy of the super-Babbitt group which operates our capitalistic system and determines, substantially, all the patterns of our lives.

### *Endometritis*

ONE of the most common of misused terms in gynecology is Endometritis. It is responsible for many indiscriminate curettements. This entity signifies an inflammation of the corporeal endometrium. The uterine mucosa is subject to acute and chronic inflammation. The acute inflammations result from infection of the endometrium by the gonococcus during the course of gonorrhreal disease or by the staphylococcus, streptococcus, or other pus-producing organisms following abortion, premature labor, intra-uterine manipulations or operation. Clinically, these types are associated with fever, abdominal pain and symptoms of pelvic peritonitis. Acute endometritis is usually a part of a more extensive pelvic lesion such as salpingitis, cellulitis, ophoritis, and pelvic peritonitis associated with an ascending gonorrhreal or puerperal septic infection. The management of these cases is always conservative. Measures to increase the natural resistance of the individual are employed. Repeated blood transfusions, sunshine, etc., have been of great assistance in accomplishing this purpose. Intra-uterine manipulation is definitely forbidden. However, in postabortal cases with retention within the uterus of placental or decidua tissue lying within the operative field, in presence of active bleeding or

sapremic conditions, the products of conception can be removed with a sponge forceps. Curettage is a most dangerous procedure since it destroys the leukocytic protective wall of Bumme and helps to spread the infection into the deeper tissues, lymphatics and blood vessels. This procedure is as much contra-indicated as scraping of a diphtheritic membrane of the throat.

Chronic endometritis is usually a misnomer. A chronic inflammation of the endometrium is very rare. What has been considered histologically in the past as chronic endometritis is now recognized as a physiological participation of the endometrium in the menstrual cycle. For an accurate diagnosis of chronic inflammation of the endometrium, plasma cells must be present in large numbers. Thickening of the endometrium is not regarded as an evidence of chronic endometritis, but rather as an excessive development of the endometrium spoken of as hyperplasia. This is the result of an endocrine disturbance which interferes with the normal periodic changes in the histologic appearance of the mucosa. The symptoms of this type are usually leucorrhœa, uterine bleeding and dysmenorrhea. The leucorrhœa has its origin from the infected cervical glands. Uterine bleeding may be explained by an endocrine disturbance with hyperplasia and not as resulting from a chronic inflammation of the endometrium. Dysmenorrhea can result from some ovarian disturbance. This entity may be regarded as possibly in association with other lesions such as endocervicitis, retroversion, adnexal disease, etc. Hence, it appears to play no clinical rôle since it is overshadowed by these lesions. Removal of the affected mucosa by curettage is only permissible for diagnostic purposes or in conjunction with other pelvic operations.

Another type of endometrial change encountered is hyperplasia. This type of endometrium is usually two or three times the normal thickness. Some writers have regarded this condition as a physiologic process gone astray. It is the result of hyper-folliculin stimulation such as is usually met with at the onset of puberty, or even more regularly in the hemorrhages of the preclimacterium. It may be associated with myoma uteri or with the so-called chronic metritis about the menopause, possibly as an evidence of disturbed function. It is present in

cases of granulosa cell tumors of the ovary. The most common symptom in this group is menorrhagia. Curettage temporarily check symptoms, but its value has a greater diagnostic than therapeutic significance.

Uterine polyp is a localized hypertrophy of the endometrium which, after it has attained a certain size, takes on a distinct new growth appearance. This tumor is composed of glands and stroma similar to the endometrium. The surface is covered with low columnar cells. Hyperplasia of the glands and stroma may take place as in the endometrium. These polyps may vary in size from a tumor no larger than a pea to one that entirely fills the uterine cavity. Various forms of degeneration and infection of these tumors may take place with occasional malignant change. The symptoms are usually increased vaginal discharge with subsequent menorrhagia and metrorrhagia. Since the symptomatology resembles cancer, diagnostic curettage is indicated for a positive diagnosis. However, curettage should be postponed if the tumor is infected or necrotic.

Briefly, the use of the curet should be for diagnostic purposes and is most certainly contra-indicated in acute endometritis, and in other types of endometrial disturbances associated with amenorrhea. The common practice of routine curettage for endometritis should be abandoned unless uterine bleeding is present.

V.P.M.

#### *Human Erosion*

A SPECIAL faculty committee of the Georgia School of Technology, in a government report, holds the advances of medical science responsible for bringing about one major form of human erosion, the "decadence of our national health." This type of human erosion, says the committee, is now fully recognized by authorities in biology and medicine.

The term human erosion may be considered to include those dislocations of body, mind and spirit produced by the vast social forces to which a modern nation is exposed. The causes of such erosion are many and only a few can be mentioned here.

The most destructive natural and social forces are listed as war, land erosion, industrial specialization, and the advances of medical science.

War is the most powerful of these factors. Land erosion produces a shifting agricultural population or an impoverishment of agricultural workers. Industrial specialization renders workers highly vulnerable to economic changes. Medicine prolongs the lives of the weak and physically unfit, which, in a very real sense, undermines the physical well-being of future generations.

The report suggests that our institutions of higher learning must abandon the traditional worship of unrelated knowledge for itself alone and begin the work of developing leaders of thought and action who may be better able to guide this country toward a solution of its difficulties.

This puts medicine definitely on the defensive on one more count.

On the basis of such judgments, medicine may yet find itself in a curious and ironical situation. Will not society make the allegedly devastating results of medical advances an excuse for never paying physicians who labor on a vast scale in a myriad of institutions in ways once considered noble and fruitful? Service for the handicapped and inferior may yet find itself in a dubious classification. For even with less excuse, society to date has seemed sardonically to say to us, on this score: You can't win!

#### *Today's Birth Control Amateurs*

AT THE recent New York Conference on Birth Control a claim of 96.4 to 97 per cent success was recorded in behalf of the contraceptive devices employed by the Birth Control Clinical Research Bureau (56,000 cases). The aim of the cult and its High Priestess, *la Sanger*, seems to be to attain the same alleged record among the submerged millions to whom present methods are economically or geographically unavailable. A bitter cry went up at the Conference for a cheaper and easier means whereby the lowly and unprivileged might share in the almost childless Utopia of the cultists. If (!) one believes in the 96.4 to 97 per cent success of the clinics and one imagines it applied to 100,000,000 guinea pigs, one must conceive the attainment of such a Utopia, for despite the affirmations as to a reasonable objective, success would spell race suicide. To assume otherwise is to postulate man as a reasonable creature. He is nothing of the sort in matters of sex, war and the profit motive.

However, the "democratization" of birth control which the cultists predicate is still some distance away if what they have in mind is motion picture propaganda and the sale in "five and ten" stores of guaranteed spermtraps (six for five cents).

It is probable that the cultists of today are really right-wingers, indeed reactionaries, who will be supplanted by crusaders of a quasi-religious fervor akin to that of the Communists. Today's timid protagonists of the movement obviously look forward to a more aggressive and fanatical succession, closely allied with scientists (there is now a research fellowship in "chemistry" at New York University). Thus through their essential conservatism, rooted in a Victorian "hangover," we find them strongly inclined to be cautious and inhibited with respect to premarital advice. This generation of uplifters, naturally, cannot entirely free itself of the heritage of puritanism.

The recent Conference served chiefly as a soundingboard for the expression of pious hopes. Pious is the word. There was much talk of experimental methods which promise to "revolutionize" the wretchedly crude practices of the present period of evolution, marking an "advance" though they do beyond the barbarous exhibits of past conferences.

In this connection we would do well to bear in mind Professor Raymond Pearl's suggestion on December 29, at the annual meeting of the American Association for the Advancement of Science, that self-engendered destruction of the major part of our populations, homologous with the biologic example offered by such mammals as the lemmings of Norway, may impend. A climax of wholesale race suicide, of which war is only one instrument, may be at hand. Birth control, distorted as it is bound to become, is an instrument even more formidable than war.

Professor Pearl finds it easy to believe that war may yet entangle in its meshes the major portion of mankind, and achieve a destructiveness hitherto undreamed of. Running neck and neck with war in potentiality for mischief are impending biologic discoveries which will put into the hands of the uplifters something much more potent and available than poison gas.

#### *Nothing But Babbitts?*

ON THE basis of Lange-Eichenbaum's study of abnormal geniuses derived from stock carrying hereditary taints of

the type that would seem to certain minds to justify sterilization, the American Neurological Association's Committee on Eugenical Sterilization declares in its report that such geniuses have been worth more to society than the cost of maintenance of all State institutions put together, and would have been lost if sterilization laws had been enacted on a compulsory basis. The Committee lists, as examples of psychotic drunkenness, paranoia, psychopathic personality, manic-depressive insanity, neurosis and schizophrenia, Hans Andersen, Beethoven, Blücher, Goethe, Grillparzer, Hauff, Hoelderlin, von Kleist, Poe, Verlaine, Mayer, Schumann, Newton and Strindberg.

Suppose that the tainted progenitors of these "queer" people had been sterilized. Should they have been sterilized? Should these geniuses have been prevented from being born? Have the symphonies and scientific theories produced by such geniuses no social value?

Heed must be paid to Dr. Foster Kennedy's recent warning that compulsory sterilization may work serious mischief and leave us nothing but Babbitts.

#### *Inbreeding in Medicine*

WHAT might be called a tendency to inbreeding exists in many of our institutional groups. Each group elects or selects members whose "scientific religion" conforms closely with its own. This makes for a smoothly working organization but one which is pretty sure to be mediocre. At the same time all the dangers and inconveniences of a Semmelweis are avoided, for such men undoubtedly do introduce dangers and inconveniences along with their advances. But the drawbacks of inbreeding are all there, too. If a "union card" is exacted in these matters, we are not likely to breed any great figures. When there is no room in the inn, the great figures will have to sleep in the stable.

A partial corrective is the "democratic" medical society intercourse, although here again the "scientific religions" of the disparate groups are, after all, only fused with somewhat indifferent success into a mass mythology. This works pretty well despite disquieting creaks. Nevertheless, all is not quite well in Denmark.

#### *Competition Plus*

THE old story goes that Professor Charles Eliot Norton once began a lecture at Harvard by saying, "I suppose that

none of you young men has ever seen a gentleman." Hyperbole, of course. In the same sense one might say to a body of medical students nowadays, "I suppose none of you young men and women have ever seen a general practitioner." Hyperbole again, but they might truly be said never to have seen what used to be called a general practitioner, chiefly with respect to cultural, ethical or professional standards. James Truslow Adams, in an article following this line of thought, makes the valid point that in so far as such standards are now lacking, an unfair competition is forced upon those who still try to maintain them.

#### *Foiling the Captain of the Men of Death*

THERE is no better yardstick of progress in the treatment of tuberculous patients with pulmonary cavitation who used to occupy isolated wards in certain hospitals, waiting for the fate that usually befell them, than to witness the transformation in those same institutions today,

#### **PRESENT STATUS OF DIETARY REGIMENS IN URINARY INFECTION**

ANSON L. CLARK, Oklahoma City (*Journal A. M. A.*, Oct. 17, 1936), states that during the last five years medical urology has progressed in two ways: first, by a more careful study of the organisms most frequently associated with urologic infections, and, second, by attempts at inhibiting the growth of those organisms with dietary therapy. The extensive use of yeast so popularly advertised may thus be a cause of increasing the crystalline elements in the urine. Several patients have been observed who passed numerous small oxalate calculi following the prolonged ingestion of yeast. With the excessive fermentation that must follow a diet containing a cake of yeast three times a day, sufficient change in carbohydrate metabolism may take place to increase the oxalates in the urine to a dangerous amount. Five years ago for the first time the ketogenic diet was given to a patient in an effort to control a very resistant recurrent cystitis and pyelitis in which the infecting organism was the colon bacillus. For fourteen months previous to this, many different types of therapy had been applied with only temporary relief to the patient. The products of the ketogenic diet

with their facilities for treating suitably selected cases of the old tragic type by modern surgical methods, particularly phrenicectomy and thoracoplasty. One now sees cases with collapsed cavities, with negative sputum, and with good prospects of clinical cure, that were formerly classed among the surely doomed. No more dramatic metamorphosis in methods and results can be cited in the whole range of medicine.

One who saw the old set-up, and now sees the new, can best appraise the meaning of the change in terms of hope, relief, cure, and progress.

#### *Life Extension*

**L**ONGEVITY, says Albert Guerard, Sr., is a marvelous virtue. "It turned Voltaire into a patriarch, Hugo and Anatole France into national idols; it is turning John D. Rockefeller into a saint. Wilson's one damning fault was that he did not live, hale and hearty, until eighty-five. Death is a stupid argument, but it is unanswerable."

permanently eliminated the infecting organism from the urine in twelve days. In an analysis of the first 200 instances in which this type of therapy was used, it was found successful in approximately two out of three instances. Statistics show that the ketogenic treatment has been even more successful in the child, possibly because the liver of the adult has a greater glycogen storage capacity. Rosenheim suggested that a keto or hydroxy acid, if non-toxic, which would be excreted unchanged in the urine, might replace the ketogenic diet. The adult dosage suggested is 12 Gm. of mandelic acid daily in divided doses. At the same time the acidity of the urine is increased by giving either ammonium nitrate or ammonium chloride orally.

#### **DIAGNOSTIC ASPECTS OF ROENTGENOLOGICALLY NEGATIVE GASTRIC DISORDERS**

GEORGE B. EUSTERMAN, Rochester, Minn. (*Journal A. M. A.*, Oct. 31, 1936), states that in the process of elimination, a negative report is of the greatest diagnostic value and would for practical purposes exclude ulcer of the stomach and duodenum, gastric carcinoma, pyloric and duodenal obstruction and duodenal dilatation from whatever cause.

# THE Professions IN WORLD TURMOIL

JAMES GRAFTON ROGERS, M.A., LL.B., LL.D.

Master of Timothy Dwight College and Professor  
of Law, Yale University, New Haven, Conn.

THE world we live in has been engaged these recent years in an ecstasy of vast and lofty planning. Programs of world democracy, then of universal peace under a superstate, then plans for economic equality and security which were first launched in Soviet Russia and more recently in another form have seized the imagination of our own America, have marched like pageants across the stage of our ideals. Today, in a reaction from these visions, half of Europe is following another desperate adventure into the night. This time it is the ideal of nationalism achieved by armed force, the pursuit of God with the bayonet and the gas bomb. The capacity, indeed the subjectivity, of men and women in the mass, for capture of almost any ideal which can be written large in the sky in tinted letters, seems never to weaken. We follow Peter the Hermit, Mahomet and the Pied Piper as readily in these days of schools, communications and machines as we did in the past centuries of illiteracy, village life and wooden mattocks.

It takes some courage, then, when all the world is painting on the constellations with a brush made from a comet's tail, to deal, as I propose to do tonight, with the mere saws, files and nails of our own work benches. In the end, one suspects, the movement and direction taken by the world of men is much more influenced by the routine ways and works of people than it is by their day dreaming. The coming of the stone hammer, later of the iron plough-share, of the steam engine, of the gasoline motor, of the tin can and the refrigerator, of machine-made clothes and rayon have had more to do with moulding our life of today than did Socrates, St. Augustine, Napoleon, Marx and other heroes who fed the imagination with ideas. The latter have brought many men to death and misery and some to happiness in martyrdom. The former inventions have done magic with

the daily lives of millions. At most the ideas of the good life held by these millions were somewhat tinted by the thoughts of philosophers and the poetry of singers whose names they scarcely ever knew. It may be more significant to write the songs than make the laws of men but it is of even more consequence to invent a garment or a tool. It seems possible that the most important thing in the world to the destiny of mankind is not its dreams or homes but the coefficient of the ways its individual members live from day to day. Not blue prints but brick kilns, not poems but pots, not the strategy of captains but the spirit and aim of its individual soldiers control our fortunes in peace and war. When we deal, as I will, with the trends affecting the day's work and social position of the doctor and the lawyer, to get down to my muttons at last, the subject may well be in the light of A.D. 2000, for example, of considerably more importance than the philosophy of "Mein Kampf" or "Das Kapital." The study of the changes in daily life of the factory workman or house-builder might be of even greater importance. But these last are to doctors and lawyers less interesting.

WHAT is happening to the two professions named in this present twentieth century? What can we observe to guide us in carrying on the torch, in training others to succeed us in these peculiar businesses of public health and public order which fall to doctors and lawyers? How do the tumultuous ideas and the vast physical changes going forward all around us affect these two peculiarly important guilds of men? To explore this a little is my venture for the hour.

But in the first place, why link at all the two professions? There need be no doubt on that. Of all the highly skilled and regulated occupations open to men, the lives and work of the doctor and lawyer are certainly today the most similar and are in history among the most sig-

Ninetieth Anniversary Discourse, New York Academy of Medicine, December 3, 1936.

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nificant. In the reach of the ages, only the priest who deals with men's souls has been as jealously watched, as devotedly trained, as socially honored as has been the doctor who deals with men's bodies, and the lawyer whose business is their property and liberty. Today the priest has surrendered part of his older functions to the school and the printing press. His current position has altered. The present day development of the medical and legal crafts, their numbers, their income, their organization, their social status, their régime of training are strikingly parallel. The doctor and lawyer are blood brothers, in the eyes of the average man. I seldom hear a youngster debate between the two professions as a career because the tastes and interests which give proficiency are different, but once that choice is made the novice must face almost the same practical problems in both careers. He must go through a similar period of training. He must expect much the same sort of income and of social position. His conduct standards, with their emphasis on loyalty to the client or patient tempered by allegiance to the public policy, his peculiar relations inside his own profession, the limitations on advertising his wares, are quite similar. Indeed, both professions pretend to be sciences and both remain arts.

The link between them is not altogether new. Some day when you need a cool shower of humility, turn to the little-read back pages of Gulliver's Travels. There in his account of the Kingdom of Horses, the Houyhnhnms, Dean Swift launches out at both of us. In almost parallel columns he accuses both professions of murder, fraud and greed. In the lawyers' jargon he returns the same indictment against both of us, but the particulars pleaded are different. In the medical simile, we have the same disease but the symptoms vary a little.

There is a famous quotation from an old play to the effect that "The law is a sort of hocus-pocus science, that smiles in yer face while it picks yer pocket; and the glorious uncertainty of it is mair use to the professors than the justice of it." But Voltaire said, "A physician is a person who pours drugs of which he knows little into a body of which he knows less," and the lines of William Broome so often quoted run:

"Though patients die, the doctor's paid.  
Licensed to kill he gains a place  
For what another mounts the gallows"

These libels on the two brotherhoods are exactly the same libel. We are both pronounced frauds profiting by disaster. Those whose enemies unite against them are friends indeed.

CERTAIN changes or trends under way in the last two centuries and accentuated in the present world turmoil are modifying deeply our ways of life. There is quite general agreement among observers on several of these sources of change. I propose to exclude changes in mere ideas or theories held by mankind about life, and to cling instead to causes or tendencies which can be definitely seen over a long stretch, and in the sense of science, measured and counted. Then having so selected what is as near as may be an acknowledged set of long curve developments, to go on to debate a little what they are doing and seem likely to do to the two professions. Thus we will not include the impendency of war which blazes in the headlines every morning this winter nor the sentiment for peace which four years ago seemed as significant and influential and was spread as widely in the newspapers. Neither war nor peace are new. Both are wills or emotions. Only gunpowder and ironclads are material facts.

We will omit also the political program pending in Washington, because it is after all not very new and is besides rather local to America. Such crusades as nationalism, communism and fascism are like other political phenomena only fresh forms of old impulses and demands, or at most the product of deeper causes. Even the current rise of materialism and the apparent retreat of organized religion from the center of the stage are probably only temporary fluctuations in the trench warfare between the appeal of life today and life in eternity. We can deal with sterner and more rugged facts, or at least more measurable ones than faiths, beliefs and theories.

From such a viewpoint, in an effort to read not merely the page of human life before us, but the chapter headings that have passed and the events and characters that the authors seem to be assembling for the unread pages to come, let us see what has happened to the world. The arts of law and medicine are ancient of days. We can deal in centuries. Since the days of Hippocrates and Plato, or even Harvey and Francis Bacon, some important events

have intervened to alter vastly the life of Everyman. One of these is the development of man's control, or to put it another way, the rise of the machine. The electric light, the x-ray, the automobile, the telephone, the elevator have all affected the doctor's work in recent years. The capacity to manufacture climate is upon us. The microscope was a little earlier. Most of the inventions have affected the lawyers' ways. They have also vastly altered the subject matter of both professions.

A second factor of increasing intensity is the change in population and especially its increase in numbers and its condensation in cities. This tide may wane, but, even if it does, we have not yet realized the full consequences of our present conditions. Changes of population produce fresh medical and fresh legal conditions. New institutions, such as hospitals, subways, tenements and Tammy Halls arise to vex the doctor and the lawyer both. And in much the same way.

A third factor is the accumulation of knowledge. The new world may not be wiser than the old but it is infinitely better informed. The doctors know a great deal about microbes and milk, and something perhaps about ductless glands. The lawyers know very little more about society and men's behavior than was known to the writers of the Old Testament, but what you have learned about microbes has affected the law decisively.

A fourth factor is the cumulative rise in education levels. We are keeping people in school now for a fifth to a third of their lives in America and the increase is worldwide on a smaller scale. The subway motorman has more formal education today than had the doctors who attended Samuel Pepys and "cut him of the stone" or the lawyers Shakespeare knew. A learned profession has to be really learned for distinction in a community where everybody is kept in school until he is fifteen. The public is today called upon to assume the cost of educating doctors because the wages of the profession during what is left of life after an internship cannot compete on the average with other trades in the way of paying for the investment. The same may soon be true of the lawyer.

The four factors I have named, namely, the harnessing of power in machines, the crowding of the world, the accumulation of scientific knowledge and steady rise in

average education are quite distinct and without the other. We could have greater information of the world about us without an increase in the period of education, that is, of the immaturity of the typical man or woman, for example. Yet while being separate factors, there is interplay between them. No one who looks with astonishment at modern Japan can doubt that the population is doubling because of the machine-way of life. Even more complicating is the fact that the consequences of the main developments are interwoven. The modern health department is an outcome of both greater knowledge of sanitation and more metropolitan population. The juvenile court as a modern institution rests partly on the lengthening of the educational or immaturity term of human beings and partly on new city conditions of life which change the child's environment. The latter in turn is a product chiefly of machine-made life. Finally, the humanitarian sentiments which are part of the occasion for founding juvenile courts are stimulated by the greater abundance of food and clothing we possess and can share and by decrease of demand for child labor, both consequent upon the use of machines. If, as we postulate, these four things, power, population, science and lengthening immaturity, are the chemicals changing the color, acidity and stability of the compound we call the conditions of life, the consequences of the addition of the four chemicals to the beaker are anything but simple. They are highly complicated and interrelated, and quite incapable of separate precipitation.

We can detect, none the less, some of their mingled effects upon the professions of medicine and law, and upon the lives and work of the men enlisted in those curious crafts. We can, if we dare, not as prophets, but as speculators, make some estimate of what alterations have been effected and of the trends for the future.

THE first conspicuous consequence is a great and sudden enlargement of the time and intensity of training and apprenticeship for both professions. Since 1900, let us say, the typical and, I think, the average period of training for the doctor has increased at least three years. Your more ambitious medical schools are now calling for a college degree before a student can begin his four years of medicine. This eight year period of university experience is

only a foundation for a year or two of internship afterwards.

The same sort of extension of training for law began twenty years later, but has moved with speed in the past fifteen years. The typical lawyer of a generation ago had about three years of college and law school combined after high school. Today the typical new licensee had added at least two years and perhaps nearly three on the average to the old stage of training. There is talk everywhere of further increase in the apprentice or study period. One state already requires seven years of formal education after high school. The typical lawyer today enters with more than five years of formal education after he enters college. This increase in the requirements for admission to the professions, so strikingly contemporaneous and similar, is due in part to the great rise in the general levels of schooling, in part to the greater knowledge required of the doctor and stricter character and cultural requirements demanded for the lawyer, and in part to the pressure of both professions for self-protection.

Some consequences flow. So long a period of preparation is expensive. It is costly both to the individual and to society. In other words it takes more of the students' time and also more time of teachers. Some older doctors can remember when medical education was conducted on a large scale commercially, for profit. This practice is almost vanished in medicine. It faded because the standards grew too severe rather than because the practice was attacked. In the law there are many commercial schools surviving but they are in rapid retreat. It will be surprising if any survive in 1940. Legal, like medical education, is becoming a heavy public charge. The cost of the medical school has driven more than one university president into the very hospital whose expenses were his ailment. The education of doctors and lawyers has ceased to be a mere professional affair as it was only a generation or two ago. The profession is no longer able to pay the costs individually or collectively. The public by dint of contributing either taxes or endowments has become both the purse holder and the class room director. What the public may do to the form and content of the education they now control deserves some thought. A situation new in history has formed. The profession is no longer supporting its own education.

It is obvious with training so expensive and admission to the schools now a favor instead of a thoroughfare to the student, that selective admission on a paternalistic basis will succeed the old open door policy. There may be also tendencies to narrow the training, to lengthen them, perhaps to subdivide it into separate channels, perhaps to grade it into ranks of attainment. The opportunities for favoritism and privilege become acute. All sorts of new contingencies arise with the new control and the heavy expense in which we are embarked.

**A**NOTHER clear trend in both professions is that to stronger organization unity and discipline. These are the consequences chiefly of severer educational requirements. The American Medical Association has risen in the last generation to be one of the most close-knit and powerful expressions of a craft that the world has ever seen outside the military orders. The doctors have seen also a vast increase in state, local and particularly of selective professional societies. The same movement is in process in the law. The American Bar Association is a quarter of a century behind the Medical Association, for various interesting reasons, but it is now steering the same course. If the history of organized trades is any guide (and on that score we have libraries of experience to turn to) this new comprehensive and intensive internal organization of both professions will have great issues. The classic and medieval guilds of merchants are a familiar model of this sort of thing. It would seem likely that efficiency and ethical standards would rise, for all men have pride in doing well. At the same time some evils may threaten. The new guilds may legislate for their own protection, to shield their own monopolies, nourish their own incomes, and be not always mindful of the public ends they serve. Property and dogmas may both accumulate in these societies and demand shelter against unruly progress. I can see signs in both professions. Yours is scornful of and militant against new schools of thought, and usually rightly. The lawyers, when organized, are hostile to any new political adventures which disturb the certainty and order which the jurist values. Again usually, the lawyers are right. But in neither case are the professions infallible

and power is not likely to make them more tolerant.

The numbers employed in both professions will perhaps be fewer in proportion to the population. Easy entrance and loose organization of a trade are always accompanied by the maintenance of a marginal circumference of people, half in and half out of the profession, made up of weak competitors. Guilds and labor unions have always been inclined to limit enrollment, restrict the number of apprentices and draw sharply the lines of membership. These impulses have been strong in both the legal and medical professions during the recent economic stress.

It would seem probable that the professions would develop orders and grades in their membership. The legal profession in England, which has been for centuries highly organized and sometimes extravagantly self-regulated, has exhibited a series of military ranks. The "solicitor" and "Barrister": within the class of "barrister", and "serjeant" (you will remember Serjeant Buzfuz in Dickens), "the King's Counsel", the "Bencher", the "Outer" and "Inner barrister" are terms or expressions of gradations which spring up. So far this tendency is not evident in the American bar but I seem to see signs of it in medicine. It occurs already among nurses. Perhaps the laboratory technician is already a defined grade in the general profession.

THE augmented standards of training and their consequences, the greater organization, and the possibility of graded levels with each profession if such should eventuate are all phenomena recognizable in other trades and occupations around us. Plumbers and barbers, accountants and engineers, even those cousins of our medico-legal brotherhood, the ministers and teachers, show in various forms all the tendencies we have traced in our own affairs. The level of formal education has risen in each. In each of them there is more of the tendency to increased organization, to an urge for better workmanship and sterner ethical requirements. In many there developed long ago or modernly some sort of class gradation stricter than medicine or law has known. There are master, workman and apprentice in most trades, all employed in production.

The doctor and lawyer have had more independent callings, less of the shop organization or the institutional structure than any major walk of life. Only the cultural arts, like literature, the stage and painting have been so reliant on individual effort. Our closest social relatives, the churchmen and the teachers, have for centuries been marked by cooperative labor. The independent minister is a rarity. The independent teacher scarcely exists. The church and the school, the monastery and the university are the background of the life and work of both these ancient and learned vocations. Of the organized crafts in history only the doctor and the lawyer have done their work, so to speak, on the principle of the human unit, two legs, two arms and one head. Even in the days of the great guild organization of classic Greece or Rome, and again in the medieval period, the doctor and the lawyer remained usually a solitary craftsman. The reason is a little elusive. Consultation between several men has been as usual in jurisprudence and the healing arts as it has been in pottery, teaching or engineering or any craft. Indeed it has been more common and more fruitful than in most affairs. The tools of the lawyer, his books, and those of the doctor, his herbs, and utensils have been as expensive and jointly usable as any other craft. Perhaps the very vagueness of the arts of health and justice, their very lack of precision or ease of evaluation, are the secret of the long maintained individualism of the practitioners in these two skills.

However this may be, there are signs that the institution, the group method of work, the shop, to put it abruptly, is finding a foothold at last in medicine and law. In the last two centuries the British solicitor or office lawyer has established the cooperative work shop on a large scale. The metropolitan law office with a dozen partners, two dozen law clerks and a swarm of stenographers and mechanical or clerical employees is as clearly an institution. The famous English firm called "Freshfields" carried on for many lifetimes under a trade name which was its personality. A hundred milder illustrations of the same corporate form of law practice could be cited in America. Here they are more notable because they include the barrister and solicitor divisions both in a single body. These are private institutions.

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On the public side, large aggregations of lawyers are today assembled in government bureaus, public defender's offices, prosecutor's staffs. In a field somewhat intermediate between professional groups united for their own welfare, and public aggregates assembled for a governmental function, are the battalions of lawyers enrolled in the offices of great railroads, banks and other enterprises. Today perhaps half the American bar is working in some sort of institutional structure. This is new, newer indeed than most lawyers have recognized. It is a product in part of machine civilization which encourages large aggregates, in part of condensed populations where streets and customs and market places for skill must be set up lest men go astray in cities, in part of specialization brought about by the accumulation of ideas and routines in the form of complex laws. It is not a product of our growth of science, but rather of our growth of formulas.

We turn to medicine. The same development as well you know looms there. The hospital, the dispensary and the medical group rise before our inquiring eyes. The hospital has become the theater not only for every treatment that is not trivial but for much of diagnosis. There laboratory technicians live and have their being under one roof. Many practitioners indeed are free swimmers only in the sense that they move from roof to roof, from one hospital to another in the course of a day. The hospital is the consequence chiefly of the machine. Its benefits are cleanliness, light, water, communications, tools—all machine products. Condensation of population makes its expense bearable and its accessibility a boon. The medical group is another product of similar forces, with the machine as its foundation and our vast accumulation of knowledge and routine skills with machines its opportunity for specialization. The public health service, now richly ramified, is the governmental form of this same tendency to shop work. It is not state medicine, so much discussed in years just past, that threatens the profession. It is institutional medicine and surgery, in which the state is only a provider of funds at most. For the state if carried much further will not be a state in our present sense at all but only an aggregate of innumerable feudal institutions, as unmanageable and decentralized as society itself.

These speculations, observations or what

you will, all lead in the end to emphasizing the drift in this country to a guild form of life and work in both the medical and legal professions. This tendency is evident in many walks of life. In industry, in banking, in labor, in teaching, even on the stage, the same trend is evident. Regimentation by government, which has raised its head so high in recent years, in Russia, Germany, Italy and America, is only the response of the politician to a popular sentiment for social regulation. The politician, who is in essence nothing but a man ambitious for power and prestige, has been spreading his sails in this breeze and offering the coercion which government alone has easy at hand, to carry us forward whether we seem urged to travel. I doubt if he has much to offer. The defects and abuses of political machinery are too well demonstrated in experience to justify much reliance on their use. It seems likely, if the path of more ordered and regulated life in labor, business and the professions is to be our way of going forward, that it will take the form of self-regulation within the boundaries of the crafts themselves, more readily and in the end more effectively and permanently than through dictation by society as a whole. The print of the guild or group on history is more impressive than that of the state. There in the guild and there only it seems are technical experience, common motives and persistence of purpose sufficiently focused to be effective. The state with its weapons of coercion, the bullet and the prison, is dramatic always but effective only in spasmodic form. The motives of the state are transient, its gaze wandering, its processes easily corrupted.

To approach the prospect from the angle of another inquiry, one wonders how much this process of crystallization in the profession will reduce its initiative, its adventure, its glamour, so to speak. Are the doctor and the lawyer to become mere formalists, nestling into the security of high-walled societies, drilled into dogmas by long formal training, snow-bound and hedged by the prodigious accumulation of their own information and routines, imprisoned by the very heap of tools they have invented? In such case society will surely suffer. Learning would grow sluggish. Science would be smug, content with answering questions, asking none itself. The adventurous and imaginative minds would turn away from enlistment in an

order whose priests were worshiping in creeds outworn.

The threat is real but again I am not much alarmed. There is always a frontier in the continent of human arts and sciences. Day after day we see what was yesterday an innovation, an adventure and an experiment reduced to a mere technique which can be taught to any student. Only last week diagnosis by x-ray and the operation for appendicitis were marvels of individual skill. Today the patterns are to a large degree made in both. A few years ago, in the law, the income tax and the field of corporate reorganization were subjects which the average lawyer looked upon with bewilderment. Today the accountant has taken over most of the first topic and the second is being taught in law schools. This process of reducing adventures to routine goes on so steadily in both professions that it seems to every generation as if the skills it had toiled to attain were unprofitable in its hands. But for every hill we climb new summits higher still are brought to view. Medicine is still eavesdropping and fumbling at the outer doorways of the human body. The atmosphere in which the law tries to chart its flight is altered almost hourly by new breezes of public sentiment, or chilled by new shadows of public disaster. Something has been learned and reduced to formula, but new dilemmas of navigation arise from the very fact of the conquest of the old. Some of us rest contentedly in the business of watching the instruments and manipulating the controls whose function is known. Others are trained indeed simply for assignment to these patient tasks. The restless older pilots or the more adventurous new recruits go on to new explorations and more dangerous tasks. No form of guild control seems ever to have checked the merchant who sought new seas to traffic in or new markets to create. Such is the case on even wider scale in the professions which purport to deal with public health and public order.

N FACING, therefore, a régime of vastly greater organization in both professions, we can, I think, welcome some great advantages, be mindful of the pitfalls but go forward undismayed. We are carried on in any case by forces mostly physical, all inevitable, capable only of some management and modulation. The world in its tur-

moil of reconstruction, a process never ceasing but now at least acute, seems likely to me to force upon both professions some fairly prognosticated courses. They are these.

Both professions will require increasingly long periods of training. Selection of the applicants must be made early, and it will take wisdom and some new devices to do it well. The training must be assumed by society as one of its burdens, and therefore the professions must at least deal with a new patron and perhaps a new master in its schools.

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The professions will be tightly defined, highly disciplined, restricted in personnel, but better protected and more efficient. Their control will not be governmental in the long run but professional and internal. The government will intervene spasmodically when abuses rise.

Some gradation of work, in terms of rank, income and prestige within each profession is probable. There will be hewers of wood and drawers of water as well as architects and managers. Novices will be specially enlisted and specially trained for the various levels or ranks of work.

The opportunity for imagination, initiative, industry and the seeing eye will be little affected. The great rewards will still go to the brave and wise. We have been talking these latter years out of all proper emphasis. The opportunities for human welfare afforded by planning, organization and social forethought and coercion have been exaggerated out of all proportion. If, as and when (in the lawyer's phrase), you doctors take control of procreation and proceed to plan a brave new world by handling the breeding of men as you handle the breeding of fruit flies, you may transform the species and so alter the factors in the formula. If so, you must change the scientific name of the animal. I am dealing with the swarm called *Homo sapiens*. While that species survives and breeds its young, the professions of medicine and law seem likely still to offer as they did of old the same magnificent career for him who dares.

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# A CONSIDERATION OF THE PRESENT METHODS OF TREATMENT OF *Poliomyelitis*

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A CUTE anterior poliomyelitis is the most interesting of all the contagious diseases. It has a very wide differential diagnosis, particularly in times of epidemics, when almost every disease has been mistaken for it.

## Symptomatology

The symptoms are varied. At the onset, fever is usually present; headache is common and is usually accompanied by vomiting. These three, fever, headache and vomiting, are the most constant symptoms. Symptoms of upper respiratory infection, such as cough, coryza or sore throat, may be present. In addition there may be drowsiness or irritability, constipation or diarrhea, or just malaise. There is nothing unusual about any of these symptoms, as they may be present at the onset of many acute infections in childhood. There is no reason to suspect poliomyelitis at this time.

The picture changes when the central nervous system becomes involved. The patient presents a somewhat characteristic appearance. The face is usually flushed, with a look of apprehension. There is varying prostration. Now we have pain added to the general symptoms. This may be in the neck, back, or extremities, or there may be a general hyperesthesia. Stiffness of the neck, spine, or both is the commonest sign. The patient may assume a meningitic position. Drowsiness and irritability are usually more pronounced and in some patients there may be generalized twitchings. The reflexes are variable, but at this stage they are usually hyperactive. The usual signs of meningeal irritation, such as those of Kernig and Brudzinski, are present. These signs may not all be present in the same patient, but may occur in any combination. The severity of the signs also varies. They may be very obvious or so slight that they can easily be overlooked. Acute anterior poliomyelitis should now be suspected.

## Diagnosis

Lumbar puncture is now indicated to make the diagnosis. The fluid is usually under increased pressure, clear and with an increase in globulin. Sugar is within normal limits. The cells vary in number, with most of the cases showing between 50 to 200. These cells are predominantly lymphocytes unless the case is seen very early, when they may be polymorphonuclears. The cell count, however, may be much higher. The highest count I have seen was 2000 in a patient later coming down with paralysis. One thousand or more cells is not so rare in an epidemic. As a general rule the earlier the puncture is done, the higher the cell count, and after ten to fourteen days the count again approaches the normal. While the majority of spinal fluids are clear, in those in which the cell count is over 400 or 500 the fluids usually have a ground glass appearance.

Some writers have tried to use the cell count in the nonparalytic stage as a basis of prognosis as to whether the patient will become paralyzed or not. On the basis of my own experience with about 2000 cases of poliomyelitis, I do not believe the cell counts help us in this respect. Repeated lumbar puncture has also been used in the treatment of both the nonparalytic and paralytic cases. Personally I think that repeated taps are contra-indicated. Those patients punctured for diagnosis only appeared to do better clinically than those repeatedly tapped. This is logical, too. The spinal cord is already bulging with edema, and when there is sudden release of the pressure by spinal puncture drainage, it is possible that capillary hemorrhage may be increased with a resulting permanent injury. This is particularly well shown in cases where cisternal puncture was done. These cisternal puncture cases showed, at autopsy, more pathology than those cases where cisternal puncture was not done<sup>1</sup>.

Read before the Associated Physicians of Long Island, January 25, 1936.

### **Management**

The ordinary spinal type case of acute poliomyelitis requires the usual nursing care that is given any sick child. There are four points, however, that I should also mention. (1) Rest should be prolonged until all pain and tenderness are gone from the paralyzed part. (2) A hard mattress that does not sag will add to the comfort of the patient, particularly in the acute stage if the spine is stiff, and later if there is any paralysis of the back muscles. (3) The severe muscle and nerve pain, which is often present in the first few weeks of the disease, can be partially relieved by early splinting with light plaster, sandbags, etc. In some cases sedatives may be necessary in addition to splinting. (4) Massage and hydrotherapy should be postponed until pain and tenderness are gone. This period varies with the individual case.

Bulbar cases with pharyngeal paralysis are frequently seen. This is a very serious involvement and carries a high mortality; however, we can do a lot for these patients. They have difficulty in swallowing and if the paralysis is extensive they may be unable to swallow at all. Prostration is usually marked and the temperature usually higher than in the ordinary spinal type. Vomiting may be frequent. The voice is characteristic, with a peculiar twang somewhat like that heard in post-diphtheritic paralysis of the palate. Mucus collects in the nasopharynx. If fluids are given by mouth they are regurgitated through the nose.

These cases are best treated by elevating the foot of the bed. The patient should be lying on the side or abdomen so that the secretions collected in the nasopharynx, and which he is unable to swallow, may drain through the mouth and nose by gravity. Suction with the ordinary tonsil suction apparatus is valuable in keeping the nasopharynx clear. These procedures aid in the prevention of aspiration pneumonia.

The patient must be given sufficient fluids. Rectal retentions of ordinary tap water are usually well tolerated since most of these cases are in the older age group. The elevation of the foot of the bed also aids in retaining the fluids. Clyses may be given when additional fluid is necessary.

Nothing is given by mouth till the temperature drops, usually about the end of the first week. If the patient is then still unable to swallow gavage may be started,

always starting with a small amount, as the first few gavages may be vomited. Many of these patients are able to swallow well by the end of the first week, but others may be unable to do so for some time.

The mortality rate, as I have said, is high in this group, but those that do live usually recover completely. However, I have seen several patients with a permanent change in voice and some retention of mucus in the pharynx.

The Drinker respirator was extensively used in 1931. The ideal case for respirator treatment is that in which there is spinal involvement only. These patients have involvement of the intercostal muscles, so that the chest barely moves with respiration. Breathing is carried on with the aid of the diaphragm and accessory muscles. The diaphragm may be partially involved. Unfortunately, these patients always have paralysis of both arms and usually of both legs.

The appearance of the advanced case is pathetic. The patient lies motionless. There may be moderate cyanosis and sweating. The alae nasi dilate and all the accessory muscles may be used. I saw one case in which the pull of the sternocleidomastoid muscle was so strong that the clavicles were lifted from the sternoclavicular joint with each respiration. Respiration is extremely shallow. Speech and swallowing are difficult.

THE patient in the respirator very rapidly learns to breathe with the rhythm of the machine. He also soon learns to talk and swallow with the motion of the respirator. He then goes to sleep and sleeps a long time, depending on the degree of exhaustion.

The machine is usually started on 10 cm. of negative water pressure and later gradually increased to the most comfortable pressure, which is usually not higher than 18 cm.

The respiratory speed is set at that rate which may be closest to the normal rate. The patients of 7 or 8 years of age usually do better on 15 respirations per minute. Those in the younger group, 30 respirations per minute. On the older type machine there was a 45-respirations-per-minute disc. I saw an older patient develop an alkalosis from hyperventilation when, by error, this high respiration rate was used.

A good nurse, familiar with the working of the respirator, is absolutely essential, as these patients require the best of nursing and frequent change of position. They are prone to develop pneumonia.

In several institutions I have seen patients with deep cuts on their necks due to the action of the respirator collar. We found that the best way to prevent these was to pad the neck under the collar. Smear liberally a 4-inch gauze, of 8 or 10 thicknesses, with sterile vaselin and apply it directly to the neck. Over this wrap several similar layers of plain gauze and then apply the collar over this padding. Collars of thick sponge rubber are now being made for this same purpose.

It is difficult to decide when to take a patient out of the respirator. There are two criteria: (1) ability to breathe comfortably and (2) ability to cough well. Unfortunately, many of the cases are so permanently damaged that a good cough is impossible.

In taking a patient out of the respirator, the pressure is gradually decreased to zero while keeping the motor running. The patients are very apprehensive and if the noise of the motor stops they get panicky. The response of the patient with the pressure off the respirator is observed and if breathing is comfortable the patient may be removed from the respirator for a few minutes. The period out of the respirator may be gradually increased from day to day. The length of time will vary with each individual patient, depending upon the physical condition.

The ultimate prognosis of this group of patients is very poor. Many die in the acute stage of the disease from extension of the paralysis to the bulb. Others die from pneumonia and atelectasis in the respirator. Those patients surviving the machine are still bad risks. Most of them are unable to cough well and when they develop a common cold they are unable to keep the lungs clear of secretions, frequently developing atelectasis and bronchopneumonia. The lungs of these patients, at autopsy, are greatly atrophied and, of course, show atelectasis and pulmonary infiltration.

The straight bulbar case with pharyngeal paralysis only should not be treated in the respirator. The machine does these patients no good and tends to increase the danger of aspiration pneumonia.

#### Serum and Vaccines

In 1910 Levaditi and Landsteiner<sup>1</sup> found that blood serum from a case recovered from poliomyelitis would neutralize the virus. This is the basis of the modern treatment with pooled convalescent serum.

Convalescent serum was used in the 1916 epidemic, the consensus of opinion being that it was of no value after paralysis had developed. Since then there have been numerous reports, mostly favorable, on the use of convalescent serum in the treatment of pre-paralytic cases. However, these reports are on small series of cases and without adequate controls.

It was not until 1931 that serum was used in a large series and with suitable control cases. Kramer and Aycock, in their report on a well controlled series, failed to show that convalescent serum was effective. The Poliomyelitis Committee of the New York Academy of Medicine<sup>4</sup>, in its series, arrived at much the same conclusion. Neither report condemned the use of serum. Park<sup>5</sup> combined a series of cases, using those of the city hospitals, those of the Health Department and those of the New York Academy Poliomyelitis Committee. There were 519 cases in the treated group, of which 31 per cent showed weakness or paralysis; 3.8 per cent died. There were 408 controls and of these 27 per cent showed paralysis and 0.9 per cent died. Park concluded that when the virus had produced changes in the central nervous system, sufficient to cause symptoms making a diagnosis possible, it was already too late to expect a curative effect from the injection of convalescent serum.

During 1931, serum was used intraspinally as well as intravenously and intramuscularly. Those cases receiving intraspinal serum showed, at autopsy, more severe pathology than those in which no serum was used. These findings were also present when any other foreign substance, such as serum or adrenalin solution, was introduced intraspinally.

Rosenow<sup>6</sup> has cultivated a green-producing, pleomorphic streptococcus from cases of acute poliomyelitis and from these an immune horse serum has been made. Reaction with immune horse serum was very severe and its use was soon discontinued. The reaction was particularly severe when given intraspinally, resulting in a few deaths.

Solutions of adrenalin were used in 1916 by Meltzer<sup>1</sup> and by Brahdy and Scheffer<sup>2</sup> in 1929. Retan and Kubie<sup>3</sup>, also Spurling<sup>4</sup>, used continuous spinal drainage. Hypertonic solutions intravenously have been used by others with enthusiastic reports on very small series. Transfusion with parents' blood and blood from immune donors has been used; autotherapy, the injection intramuscularly of the patient's own blood or spinal fluid, has also been used.

It would appear that the average patient in the acute stage would do best with rest, good nursing care and prevention of deformities.

MORE recently there has been great publicity on the prophylaxis of poliomyelitis. The injection of whole parents' blood, or pooled convalescent serum, has been used in previous years. Large doses, 60-100 cc. of parents' blood or 20 cc. of convalescent serum, were given intramuscularly. I have heard of several cases developing the disease after such injections.

Dr. Kolmer, during the past summer, injected about 12,000 children with prophylactic vaccine made of a virus attenuated by monkey passage and further attenuated by adding sodium ricinoleate. Dr. Maurice Brodie of New York injected about 10,000 children with his vaccine, using a virus supposedly killed with formaldehyde. Both these vaccines were tried on monkeys and on the workers themselves before the large experiment was made on children.

Dr. J. P. Leake<sup>5</sup> of the United States Public Health service reports twelve cases of poliomyelitis developing in these injected cases six to fourteen days after the inoculation. He advised discontinuing its use. It is interesting to note in Dr. Leake's report that the paralysis in these cases developed at a cord level corresponding to the level of the injection. This suggests that the virus travels by way of the nerves and supports the contention that the portal of entry in the usual case is through the nasopharynx and by way of the olfactory nerve to the central nervous system.

We have seen reports still more recently of experimental work on monkeys. Dr. Jungblut of Columbia injected monkeys with small amounts of Vitamine C and found them more resistant to poliomyelitis than the control animals. Dr. A. B. Sabin

and his associates of the Rockefeller Institute are using nasal sprays of sodium alum and tannic acid, finding that the animals so treated are resistant to the disease.

It is interesting to know that the New York City Sanitary Code was revised on October 22, 1935. The quarantine period of patients is now only fourteen days from the date of onset and patients may now be admitted to the general hospital ward provided the case is adequately isolated by cubicle or screen.

### Conclusion

In conclusion, we have, at present, no specific drug, serum, or vaccine that has proven of value in the early treatment or in the prophylaxis of acute anterior poliomyelitis. However, I would stress the use of lumbar puncture in making an early diagnosis, so that proper isolation may be established.

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862 UNION STREET.

### Sex of Baby Easy to Foretell

Doctors cannot determine the sex of babies before they are born. I can. About four months before you are confined, along with your wife, buy a baseball mitt, a rifle, and order literature from a good military school. Your daughter then will be born.

—James H. Street  
in *New York World-Telegram*

# NEUROCIRCULATORY ASTHENIA IN THE AGED

MALFORD W. THEWLIS, M.D.

Wakefield, R. I.

**N**EUROCIRCULATORY asthenia ("N.C.A.") is not uncommon in the aged, either as a condition *per se* or in combination with organic disease. It often tests one's judgment to evaluate the symptoms. We may be dealing with an organic disease, which is not causing symptoms; the actual cause of discomfort may be due to neurocirculatory asthenia.

The condition was described by Sir Thomas Lewis as "effort syndrome" but in 1918 the term neurocirculatory asthenia was suggested by Oppenheimer, Levine, Morison, Rothschild, St. Lawrence and Wilson. These authors felt that the term described a well-defined syndrome characterized by certain nervous and circulatory symptoms combined with an increased susceptibility to fatigue. It is when the condition is associated with organic heart disease that the diagnosis is most difficult, according to Edwards and White.<sup>1</sup> These authors found that rheumatic heart disease was the most common heart condition associated with neurocirculatory asthenia; coronary disease second and hypertensive heart disease third. They found only one case with cardiovascular syphilis. They found that 65.2 per cent of cases of neurocirculatory asthenia were uncomplicated by heart disease; 19.6 per cent were complicated by organic heart disease and 15.2 per cent were observed in which neurocirculatory asthenia was present but there was a question as to the presence or absence of organic heart disease. The symptoms of neurocirculatory asthenia may lead one to suspect congestive heart failure or angina pectoris, according to these authors.

In many cases patients suffering from neurocirculatory asthenia become invalids. One patient was brought into the hospital in an ambulance after traveling from Florida—ready to die on home soil. As soon as she was reassured that there was no organic disease and was forced to get up and move about she gradually improved. In this instance she had been suffering from this condition for several years and an attack of influenza ag-

gravated it. She was constitutionally inadequate and after many worries caved in.

Another patient, aged 60, after years of severe financial strain, finally collapsed and was not able to get out of bed. She had precordial pains, radiating down the left arm, difficulty in getting a long breath, dizziness, faintness, increased perspiration and tremor. Her blood pressure fluctuated from 110 to 80 systolic. One day the pressure was low and the next day normal. Electrocardiographic studies revealed no abnormality, but fluoroscopic examination showed diminished amplitude. Her father died of coronary disease at the age of fifty-eight. She suffered a great deal, especially at night, and sighed almost continually. Phenobarbital—one-half grain four times a day—and brandy at night gave her comparative relief. For two months she tried to get on her feet, but weakness and dizziness made it almost impossible for her to carry on. She was reassured that she had no organic disease of the heart and that she must force herself out of bed and live normally. It was extremely difficult for her to make the effort but she is gradually improving.

**A** WOMAN, aged 64, had neurocirculatory asthenia several years ago, associated with a mild hypertension. Influenza brought on another attack and for several weeks she was unable to get out of bed. She suffered from precordial distress, tremor, dizziness and extreme weakness. Four months elapsed before the symptoms were completely relieved. Assured that she had no organic disease she was not able to get out of bed and complained of extreme weakness. Nothing except phenobarbital and whisky brought relief although at first ephedrine sulphate relieved the symptoms.

A man, aged 76, gave a history of a cardiac attack several years before. He now complained of difficulty in breathing at night. He continually sighed and even in the open air could not get a long breath. Opiates made him definitely worse and the only relief obtained was derived from phenobarbital, one-half grain four times a

day, and whisky at night. There was severe pain over the sternum radiating down the left arm. It seemed evident that he had coronary disease but he had no fever (fever is not common in any disease in the aged) and no leucocytosis. The fluoroscopic examination of the heart gave no clue. It was then thought that he had some pressure in the mediastinum but stereoscopic x-ray films ruled this out. The x-ray did show a normal arteriosclerotic change in the aorta, but there was no reason to believe that there was any trouble from this source. Electrocardiograms showed nothing unusual for a man of his age.

After several thorough examinations the man was assured that he had no organic disease and was told to move about even if he felt worse; that he should walk outdoors even if he thought he might collapse.

He has gradually improved but is continuing the phenobarbital, but in this case the drug seems to give better results than is usual. Elimination of drugs is so uncertain in the aged that it is not unusual to find bromide poisoning. In fact almost any drug is poorly eliminated and we often notice the secondary effects of drugs taken a few days before.

One problem faced in this case was the fact that in old age the respiratory muscles cease to do their work and the breathing becomes abdominal. This is a normal finding in senility. Just how much importance could be attached to this finding is questionable. In this case there is no evidence of the usual causes of neurocirculatory asthenia—following infection, constitutional inadequacy, financial or other strains, family troubles or other mal-adjustments, operations. There was no excess of tobacco, alcohol or coffee. In fact it has been shown<sup>2</sup> that coffee, tea, alcohol and tobacco are not causes of neurocirculatory asthenia, although they may aggravate the symptoms.

This patient suffered from gastrointestinal symptoms—heartburn and gas. Craig and White<sup>3</sup> have shown that nearly one-half of their patients suffered from some functional gastro-intestinal complaint. They noted that many patients who complain chiefly of gastro-intestinal symptoms also complain of one or more of the cardinal symptoms of neurocirculatory asthenia—palpitation, respiratory discomfort, precordial distress and exhaustion.

Other symptoms enumerated by these authors are faintness, syncope, insomnia, headache, dizziness, increased perspiration, difficulty in swallowing, tremor, flushing and pallor.

These symptoms may occur in such a way that the diagnosis is difficult. The sighing respiration is almost pathognomonic; Craig and White found it in seventy-seven per cent of cases.

We commonly think of cardiac symptoms of neurocirculatory asthenia but it is interesting to see other patients who present other symptoms. A woman, aged 58, has had neurocirculatory asthenia for several years but the main symptoms are pelvic although repeated examinations have failed to reveal any abnormality. She is weak at times and always has a sighing respiration. She has never had any cardiac symptoms. Bromides give her relief—in fact she can take no other form of medication.

Another woman, aged 74, has had some of the cardinal symptoms of neurocirculatory asthenia for several years—exhaustion, faintness, dizziness, but never any cardiac symptoms. Her symptoms in their entirety point to the gastro-intestinal tract but repeated x-ray examinations have failed to show any organic disease. This patient has taken many drugs without relief. She does the best on reassurance that she will be relieved. She borders on the psychasthenic and neurasthenic side but neurocirculatory asthenia seems the correct diagnosis. She is constitutionally inadequate.

**SIGHING** seems to be the main clue to the diagnosis. White and Hahn reported it in eighty per cent of 100 cases.<sup>3</sup> An actress found that she was quite well when not playing but as soon as she worked she was short of breath and exhausted. She had frequent attacks of diarrhea while playing. Evidently, the moment some of these patients face anything out of the ordinary they react with certain symptoms. They just cannot face life as they should, yet they plug along year after year with a certain amount of real distress. Further analysis may show that a great many neurocirculatory asthenia patients suffer from gastro-intestinal disorders rather than cardiac distress.

As to the constitutional type, we are rather apt to suspect the thin ptotic in-

dividual as the type for this syndrome. However, Craig and White<sup>1</sup> have shown that only nine percent of their cases were poorly developed or undernourished. In fact, the majority of the patients were well developed, well nourished or obese. As to the cause of the condition they conclude that some cases follow severe infection, operation or other illness. Others follow prolonged fatiguing work or heavy strain of some kind without respite. They distinguish "N.C.A." from irritability of the heart and from neurosis or neurasthenia. According to them, sighing respiration and precordial tenderness are important confirmatory signs and almost pathognomonic of neurocirculatory asthenia. Fifty per cent of their cases showed "functional" systolic murmurs which were increased after exercise; there were frequent variations in the systolic and diastolic blood pressures and the

electrocardiograms showed various things, including sino-auricular tachycardia in some cases, and eight patients had diphasic T waves in lead 2 and inverted T waves in lead 3.

Perhaps one of the most difficult problems we face is the diagnosis between neurocirculatory asthenia and hyperthyroidism. The writer has already pointed out<sup>2</sup> that thyroid disturbances are fairly common in old age. No doubt many patients have had thyroidectomies when the actual condition was neurocirculatory asthenia. Both groups have irritability, nervousness and tremor. The neurotic type usually complains of symptoms of many years duration. Many other symptoms are the same: loss of weight, faintness, dizziness, increased perspiration, choking sensation in the throat. Bueermann<sup>3</sup> gives some interesting observations which might be epitomized as follows:

#### **Hyperthyroidism**

Tachycardia, nervousness, irritability and tremor. Loss of weight and strength; goiter, exophthalmos and stare.

Tachycardia persistent through day or night, not influenced by rest but altered by excitement and exercise.

Systolic blood pressure often elevated over 150. Choking not complained of until size of goiter obviously justifies these complaints.

Self-confidence that they can do physical and mental work to full capacity and often do not give up until exhausted. Do not remain quiet. Constantly on the move—frequent changes of position. Speech quick and jerky. Optimistic.

Regular, short amplitude.

Eats normally but loses weight.

Loss of strength usually noticed first on going upstairs. Weakening of quadriceps muscle is specific and characteristic of hyperthyroidism.

BMR higher. Tests should be repeated.

Hands moist and warm.

Pulse does not change on relaxation.

Lugol's solution and mild sedative make a marked clinical improvement.

Finger nails flattened; striated nails; turned up ends and a deep undercut which shows evidence of difficulty in cleaning.

Peculiar orbital edema.

#### **Neurocirculatory Asthenia**

All of these except exophthalmos and stare.

Pulse erratic. Resting pulse lower.

Seldom over 110 or 115. Neurotic boasts of long-standing nervousness. Choking prominent symptom.

Patients sit quietly while describing symptoms; emotional instability not manifest except in describing disturbing events. Sit placidly and boldly assert nervousness. Pessimistic.

Tremors coarse, irregular.

Loss of weight associated with poor appetite.

Loss of strength gradually developed and continuous.

May have a slight rise in BMR +10 to +20. May be +30 during crises.

Handshake: hands cold and clammy.

Rest lowers pulse except in presence of foci of infection.

No improvement except in pulse rate with

Lugol's solution.

No changes in nails.

Not present.

BLOOD cholesterol determinations may assist in the diagnosis. In fact, we believe that all BMR estimations should be accompanied by this test.

A low blood cholesterol, combined with a high basal metabolism rate, is quite conclusive of hyperthyroidism. The neurotic individual may show an increase in the basal metabolism rate but the blood cholesterol or blood lipids may be increased instead of decreased.

Prioleau<sup>4</sup> well points out that the basal metabolism rate cannot be relied upon ab-

solutely as it may be a little high in neurocirculatory asthenia and within normal limits in definite cases of hyperthyroidism. In hyperthyroidism the onset is more definite and if a previous good health record is given neurocirculatory asthenia may be ruled out except in those cases following infections. In "N.C.A.", Prioleau shows that the heart symptoms are out of proportion to other findings; the patients are more listless and often resigned to the worst. He feels that a slight, soft enlargement of the thyroid gland is

of no special significance but if the gland is normal to palpation it does not rule out hyperthyroidism.

In the mild cases the diagnosis of neurocirculatory asthenia is difficult. Many of the ordinary symptoms may be absent in mild cases. By no means is it essential to

have symptoms referable to the heart although slight palpitation and arrhythmia are not uncommon. Past middle life and in old age it is not easy to differentiate the condition from angina pectoris or coronary thrombosis. The following table may give some clue to the diagnosis.

#### N.C.A.

Dull heart ache. Pain may or may not radiate to arms. Substernal oppression not usually felt.

Frequent sighing.

Pain often apical, lasting for hours.

Precordial hyperesthesia, not relieved by nitrites. Often seen in young people.

#### N.C.A.

Fever and leucocytosis absent.

No flattening of left cardiac border.

Blood pressure low.

No signs of congestive failure.

Previous attacks of apical pain.

Electrocardiogram taken at apex negative.

Morphine apt to aggravate.

Breathing is not labored.

#### Angina Pectoris

Pain radiates to arms. Substernal pressure.

Absent unless the two conditions are combined. Pain of short duration.

Absent. Relieved by nitrites. Usually after middle age.

#### Coronary Thrombosis

Fever and leucocytosis.

Flattening of left cardiac border.

Blood pressure increased; however, during attack pressure may fall below 100 systolic.

Signs of congestive failure.

Previous angina attacks.

Electrocardiogram taken at apex gives definite clue.

Morphine gives relief.

Labored breathing.

Essesson<sup>1</sup> feels that the symptoms of "N.C.A." are probably of endocrine origin, plus hereditary influences. He feels that pulmonary tuberculosis must always be kept in mind.

The point is that we must be most thorough in our examinations in order not to overlook some underlying cause. Early cases of pernicious anemia might give some of the symptoms of neurocirculatory asthenia. Foci of infection may give symptoms suggesting the syndrome. In most senile cases, no doubt, we may find some underlying pathological condition, but there are cases in which the syndrome exists *per se*.

Treatment consists of a thorough physical examination and reassurance that there is no organic disease. The diet should contain adequate vitamins. The patient may be better off if overweight if the blood pressure is low. Rest periods after meals are advisable but a certain amount of work and exercise should be insisted on. It is a mistake to allow a person to keep quiet because of faintness, dizziness and exhaustion. Anything which causes worry should be eliminated insofar as possible. Most of these patients continue on the same routine year after year and it is not a bad idea to change it at intervals. Whisky or brandy may relieve

the dyspnea if intense and phenobarbital, one-half grain before meals and at bedtime, seems to give more relief than any other drug although bromides work even better than phenobarbital in some cases. In others ephedrine sulphate,  $\frac{1}{2}$  grain three times a day, gives relief. In older patients this should not be continued too long because of the dysuria which may result. The patient must be reassured at frequent intervals and told that the condition is remediable. At the menopause patients of this type should be carefully treated.

#### Resume

1. Neurocirculatory asthenia in the aged, *per se*, or in combination with organic disease, is not uncommon.
2. When associated with organic heart disease, the diagnosis is difficult.
3. Cardinal symptoms: precordial distress, tremor, dizziness and extreme weakness.
4. Other symptoms: faintness, insomnia, headache, dizziness, increased perspiration, dysphagia, flushing and pallor.
5. Sighing respiration pathognomonic.
6. Gastro-intestinal symptoms may be most important.

—Concluded on page 107

## Clinical Notes

### A PSYCHOTHERAPEUTIC TEST IN DIFFERENTIATING BETWEEN TRUE MENOPAUSAL (VASOMOTOR) PHENOMENA AND NEUROSIS.

ABNER I. WEISMAN, M.D.  
Kew Gardens, N. Y.

**A**GREEING with Sevringshaus, Novak, Werner, Frank and others on the value of the estrogenic hormones in the treatment of the menopause<sup>1</sup>, there is an aspect of the hormone treatment of the menopause which should not be overlooked.

With the gradual rise of enthusiasm engendered by the remarkable successes obtained by the use of hormones, the endocrine products are being wasted in a great many instances and may even be harmful if used at random without study or careful consideration of the case in question.

Patients suffering with neurosis do not need estrogenic hormones or other endocrine therapy but are rather in need of psychological treatment and sedation therapy. The menopausal neuroses with their imaginative sensations and psycho-neurotic ideas especially fit into the category of cases in which hormones have been wasted.

In a previous communication<sup>2</sup> I reported tests of the effect of estrogenic hormones upon true vasomotor menopause cases after having eliminated the neurotic and hysterical patients from the series. This was accomplished by the administration of placebo injections and tablets. Those patients who did well on injections of sterile saline and lactose tablets were not given hormones but were kept on the placebos which relieved their complaints. At that time, being interested only in the treatment of true menopause cases which were benefited by the use of hormones, I did not realize the large percentage of patients with menopausal complaints who were "cured" by the placebo treatment. Deciding to continue along the line of psychoid-

therapeutic medication, sterile saline injections were given weekly and oral tablets of lactose given three times daily to the next forty patients who were referred to the menopause clinic. These forty patients were the general run of menopause cases and included both physiologic and surgical cases.

After 4-6 weeks of the above treatment, it was found that 22 patients were not influenced by the "medication" while 18 patients were feeling either "much better" or "completely relieved." Some of the neurotics who were "cured" could not wait to receive their weekly injection in order to prevent the onset of their symptoms, while others brought their neighbors to the clinic to benefit by the new injection cure for "change of life."

The purpose behind this short paper is not to in any way offset the value of the hormones in the treatment of the true vasomotor menopause cases, in which value I am a great believer, but to caution against the indiscriminate use of the hormones where they are not necessary. By this preliminary psychotherapeutic test, the practitioner can readily tell if he has a true menopausal patient or a neurotic who is at the menopause age and who has been talking a whole lot with her neighbors about the change of life and all its mysterious symptoms. In my own private practice those menopause cases which do well with placebos are kept on placebos as long as they feel well with the treatment.

The large ratio of neurotic menopause cases figuring in this series is a good deal greater than has or will be found in other clinics. This is due in a large measure to the type of patient which comes to this clinic. The Porto Rican and Spanish pa-

—Continued on page 83

From the Clinic of the Department of Gynecology and Obstetrics of the Metropolitan Hospital, New York, N. Y.

# Special Article

## *The Relations of Our Society*

### IN THESE CHANGING TIMES to the Government, to the Hospitals and to the Members Themselves

THOMAS A. McGOLDRICK, M.D., LL.D., Brooklyn, N. Y.

LONG ago this Society ordained that at the opening meeting each year its president must submit to it a statement of its condition, how well it is following the purposes of its origin, in what ways its work may be improved, reiterating and reaffirming those principles which underlie the work of the doctor, and announcing the present relations of the Society to its individual members, to the medical profession, to the public and to the institutions with which it must come into close contact.

On some of these relations I report to you tonight.

It is a particularly brightening time in which to report. The depths of our recent financial depression have been traversed and the upward road is being climbed with hope well founded on progress already made. The distress and suffering of so many people, for so long a time so well known to us, have entered every heart and have tended, at times, even in our own profession, to warp the mental vision. Under the guise of relief, many projects, schemes and plans have been offered, generally from outside the profession, most of which would work ultimate disaster. With the passing of the darkness comes calmer, unhurried judgment, and the brighter day at hand will permit the sight of things in proper perspective, will dispel the doubts, and will penetrate all those suggested policies which in reality were but a gospel of desperation. It is most

comforting to learn from responsible authorities that despite the hardship and discouragement of the times the quality and quantity of service of the doctors to all the people has not been lowered and the workers in medical science have continued their valuable contributions.

#### *Tasks, Duties, Study, Growth*

It seems hardly necessary to recount to you the varied tasks and duties and responsibilities of this Society, or the influence of the members through it in the State Society and in the National organization of the American Medical Association of which it is an essential unit. Its large numerical membership in this great city, the character and prestige of those members, its material possessions, all so valuable, are too well known to you to merit at this time special mention. More than a century ago it was proclaimed that the primary purpose of this Society was "to make quickly available to the profession by pamphlet, by demonstrations, by lecture, every fact and every truth of advancing medical science in order that their usefulness may be rapidly placed at the service of the sick."

Well and faithfully this Society has obeyed that precept. Lectures and demonstrations, postgraduate group work in clinical subjects, and intensive study by section or committee of special lines, of which divisions of public health, prevention of disease, maternal welfare, and

President's Inaugural Address, Medical Society of the County of Kings, Brooklyn, N. Y.

protective health legislation for the people, to mention a few, give ample testimony.

The greatest contributory factor in the scientific work of the Society and in assistance to its members is our Library. Crowded here in this building are more than 140,000 volumes, at the service not only of all the doctors in the community, whether members or non-members, but also of the interested public.

It is indicative of the continued studying of our doctors that during the past year these reading rooms were used for 15,134 visits, while the number of volumes loaned and taken home by members was 12,295. If these withdrawn volumes had to be purchased by the members using them the cost would have exceeded 75,000 dollars, or more than the total annual dues of the society.

The use of this wealth of material is greatly impeded by the lack of physical facilities. Valuable editions must be stored in places accessible with difficulty or loss of time, reading rooms are overcrowded and research hampered. The section rooms, too, are insufficient.

Fortunately relief is in sight. Our trustees have approved an architectural design for enlargement of this building, not only in its library, but in its auditorium and all other departments. Plans for financing the construction are being studied and before many months of this year will be submitted to the members for consideration.

#### *Public Relations*

It is a long time since doctors thought that the medical profession should be the sole repository of every fact associated with the science and art of medicine. This Society is solicitous for the general increase of medical knowledge on the part of the public. In this day of rapid, wide transmission of information, it is especially desirous that the people be spared the evil effects of error, the machinations of self-seeking impostors, the retardation of health measures, and the loss of money hard to spare to the unjust advertising drug or appliance manufacturer, the food adulterator, the quack or the charlatan.

The public should know the progress in medical science, the applicability of that progress to present-day needs and the limitations still existing. It should know the *real* miracles of medicine. It should

know the results to be obtained in individual immunizations, in the reduction of mortality and morbidity, and in the eradication of such diseases as typhoid and tuberculosis, diphtheria, pneumonia, diabetes and vitamin deficiency disorders.

It should know the ever-increasing accomplishments of surgery, the continuous efforts and ways to reduce the dangers in childbirth and the never-ceasing work of the doctor in the seemingly hopeless warfare against cancer.

For its own protection the public should be well acquainted with the method of selection, the qualifications required, the training at very great cost, and the licensing of men in medicine, and the reasons why the medical profession opposes the quack, the cultist, and the irregular practitioner. It should know the motives actuating doctors in public instruction.

It should know, too, that the principles actuating real doctors in their Code of Ethics and the principles based thereon have stood the test of nearly 2500 years, that these principles and ethics have been the stimulation of doctors and the inspiration to their continued self-sacrificing work for patients. It should know, as Charles Evans Hughes has stated, "that the standards of the medical profession are different from those traditional in the competition of the market place," and that the profession wants support of that public in providing safeguards against deception and against practices which would tend to demoralize the profession.

The public should know more—should know all—about the economic methods of medicine. It is surprising what little it does know of the costs and needs of medical care, the explanation of these costs, the amounts, the methods and the reasons for remuneration. The President of our State Society, Dr. Winslow, has drawn special attention to the fact that the public, informed, can be trusted and that the effect of the recent propaganda in more than a thousand colleges and high school debates on socialized medicine fell far short of the expectations of the promoters. It is encouraging to note that during these past few years nearly four hundred plans making changes in economic methods, some of them sponsored by foundations of great wealth, have failed to break through the good sound sense of the public. Organized medicine would inform that public of the

study it makes of all such plans, and its contribution to them in insisting on such fundamentals as the patient's choice of his physician, the confidential character of the professional relation, and the predominance of the obligations of a physician to his patient.

This Society would have the public know how it strives to increase in knowledge and skill the qualifications of its members. It would have it known of the lectures, the demonstrations, and the postgraduate courses, but it must never lose sight of the fact that the lectures and advice given to an individual or his family by the family physician after careful examination carry the most value.

This Society would have the public know how its prospective members are scrutinized and selected, that membership carries increased obligations and responsibilities, that the County Medical Society should and does guarantee the qualifications and character of its members, and that non-membership places a doctor on the defensive.

With this knowledge the public will cooperate with us for its own good. It will require of legislators greater protection from dangerous health laws and untrained and unqualified workers. It will insist on purer food and drug laws. It will place its reprobating ban on worthless, dangerous, untruthful advertising. It will support and encourage government authorities in the expenditure of money for public health and will intelligently support social medical measures of worth.

#### Ethical Considerations

In a time of changing standards in the business world, this would seem an appropriate time and opportunity to reaffirm that Code of Ethics which has distinguished our profession and which has lived in the work of every true doctor. Some people with insufficient knowledge have said that this code is out-moded, that it does not adequately apply to present-day problems and that the flights of some daring souls into every possible method and form of practising medicine are hampered. All such statements generally carry a particle of truth. Some details have by time become obsolete, others rendered almost unnecessary by the uniform conduct of physicians, but the underlying principles have stood all these changing years, they have been officially

reaffirmed in the Principles of Conduct by our State Society but a few years ago, they are vital today, they continue to place the welfare of the patient above all else in the mind of the physician—even to that physician's very life, and "These principles will continue to save the unwary and the inexperienced from the consequences of rash or hasty judgment."

For more than a century the evil effects on public health of unrestricted drug advertising have been recognized by this County and State Society. Long before the day of the radio broadcast and the insidious propaganda of patent and proprietary medicines, this Society showed the dangers to be expected. Nearly 400 million dollars are annually spent by the people of this country for nostrums of no value—mostly by people to whom this expenditure is a hardship and to whom comes directly much suffering and in many instances death. It must be remembered that the present popular radio can be controlled, that in England no advertising or sponsored programs are permitted. Medicine in this country may well follow, in many particulars, that example.

#### Hospitals and Dispensaries

The present work and the future of the voluntary hospitals are matters of great concern to us, as doctors. The demands of our times, with the lack of facilities and accommodations for home treatments, the plans for increased social security, the increasing requirements for refinements in accommodations and hospital luxuries, and the service that may be required in the future for all those now becoming pensioners of the government through social security programs, have been making and will make still further radical changes in hospital service.

The original purpose of restoring the sick poor to health with the greatest speed is over-shadowed partially or completely at times by the subject of scientific research, and despite endowments, bequests and gifts, seemingly only those entirely-free patients are admitted who contribute to that end. Nurses being trained at great cost to specially high educational standards, very large staffs of attending doctors, many clerical and technical assistants, resident physicians and internes in necessarily great numbers, the administration organization with its members, those highly expensive instruments of

precision housed in laboratory quarters or buildings of their own, and the standardizing requirements of outside groups have compelled the voluntary hospitals to reduce their service to the indigent sick and to charge people, who could pay an ordinary fee, rates that become heavily burdensome. Competing hospitals, strictly private, organized for profit, free of many of these burdens, and caring only for those able to pay, despite the special costs of taxation and in many instances less efficient and less critically scrutinized work, have been growing in numbers and supplying many needs.

We know the great aid that has been rendered these voluntary hospitals by their lay trustees. Men and women of noblest intentions and benevolent hearts have given of their trained business minds, of their time and their money and their long-continued unselfish attention to the support and welfare of these institutions. Their burdens have been made more onerous of late by the reduction in number and amount of gifts necessarily following our depressed times and increased taxation.

No one knows better than the doctor the amount of good that has been done by these institutions. No one appreciates more the assistance that they are to the doctors in caring for the sick. Everyone should know how freely doctors have given of their services to further those real purposes that have distinguished the hospitals. Besides promulgating the facts regarding the professional relationship of doctors with hospitals this Society will earnestly encourage every measure that contributes to their material, financial interests. To remove misunderstandings, prevent unnecessary expense and hasty, ill-considered legislative activity, the existing committee of this Society and the Hospital Council of Brooklyn will review all proposed laws affecting these bodies, will prevent or oppose those inimical to their common interests and heartily support those measures that would increase efficiency and promote mutual welfare. With such feelings and relations we are deeply pained to find some institutions, for financial reasons, driving themselves into the actual illegal practice of medicine, into exorbitant charges for ancillary services, into countenancing dispensary abuses, and into various and devious forms of contract practice. Any and every one of

the forms of hospital *contract* medical work that will not gladly be given the light of day is reprehensible, and every irregular form contrary to the welfare of the people and found by the proper authorities in medicine to be unjust, unworthy and purely selfish, will be condemned and presented by this Society to the judicial Board of the American Medical Association for revocation of the registration of an offending institution.

Dispensary abuses, too, can be corrected—in fact to some extent they are now being corrected. At least 80 per cent of the present applicants to voluntary hospitals are deserving. A very great proportion should not pay anything for dispensary service, nor should they be compelled to spend many waiting hours, be given hurried attention, nor, because of the absence of money, be referred to the municipal hospital dispensary. The investigating and registering organizations now operated by the government may be utilized in the future for a satisfactory and proper control of the abuse of dispensary service. Every doctor holds that poverty in the individual constitutes a valid right to free treatment. Nearly all dispensary work was instituted by doctors, and nearly all the work of the doctors is there done without remuneration. *It must be further remembered that the costs to the voluntary hospital dispensary are in many instances greater than the costs would be if rendered by these same dispensary doctors in their own offices, and that in some recent years the dispensary patients of the voluntary hospitals in New York City have paid as much as three million dollars in one year for service.*

We believe that the appointment of staff doctors to the Board of Trustees of the Hospitals would be extremely helpful. They could show the usefulness of certain departments and the unwisdom of many experiments in the *practice* of medicine, would protect against extravagances, and would contribute their experience and judgment to the routine business measures. The conduct and control by physicians of well-known clinics and private hospitals has fully demonstrated their capacity in these executive lines.

One must look with great hope on the recently applied system to secure hospital care known as the "8-cents-a-day-plan." At the present time its great success seems assured. Further trial must be given it

to learn of its possibilities, to discover through experience the *weaknesses* in it or in its administration, and the dangers to its permanency. It applies many principles which we hold to be sound. The hospital is paid in full for service rendered. The patient selects his own physician and his own hospital and may be enabled to remunerate that physician for his services. It is satisfactory and voluntary insurance in a corporation not organized for profit, and it is an insurance not *directly* for hospital service but for the money with which to purchase such service.

It points also to a way in which people could for correspondingly small amounts of money annually insure themselves against the other costs of sickness—not for direct payment of the bills by some insurance carrier, but for certain sums of money with which to pay these bills themselves.

Experiments in special localities for several years past have met with considerable success and indicate another contributing item in the solution of this question.

#### Economics

It is with considerable reluctance that in the relations of the Society one must discuss, even briefly, economics. In the doctor's mind are thoughts and subjects much more desirable and the predominant occupation with topics of finance would be disagreeable and even demoralizing. His preference in Society activities would be for reports like the annual one of our economics committee seven years ago, which required but eight words. In the conditions and circumstances of these past few years, however, many individuals and agencies, well-intentioned as they may have been, professional and amateur sociologists often seeking their own advancement and some self-advertising economic quacks, have seized the occasion of this depression to propose for us new and ill-founded legislative measures, which we know would be destructive of the present high quality of medical care and the immense volume of that care which is now at the service of the people. There are a few thoughts never to be forgotten. During all these recent years no one has actually suffered or died for lack of necessary medical care. No one, no group, no system has ever suggested a lessening of the quality of medical care, or a modification of the ethical standards of the pro-

fession, and on medical ethics must rest real medical economics. The President of the United States has but recently called public attention to the high quality of medical care during all this depression, and the beneficial results of it to all the people. There is no doctor, however, who feels satisfied with the present method of distribution of that care, nor with the burden placed on the profession of furnishing it without remuneration. This Society must study any and every plan for improvement, no matter by whom or when proposed, not with the purpose of detecting faults, but with an anxious desire to discover contributions, however small, of worth. Any modification of existing methods that will more quickly bring the advances of medical science to their fullest possibility, and to the permanent benefit of the people, must be adopted. Simply because an idea or suggestion is novel does not mean it is true or valuable, and nothing that has already proven good must be discarded for the sake of change.

#### The General Practitioner

As an economic factor I submit to you the question of the general practitioner and his restoration to the central place in caring for the sick.

I know well the stories that the content of medical knowledge has become so vast, and even so technical, that no doctor can properly utilize it all, that diagnostic instruments are too numerous and expensive to be within individual possession, that many laboratories and their maintenance require corporate existence and protection, but I also know that no one doctor needs all these aids, that diagnostic instruments of precision are evermore widely used, that 85 per cent of the existing ailments can be successfully treated by the general practitioner, and that the general practitioner is best qualified to direct the other 15 per cent. I know that the training and education the doctor now receives before entering practice is greater and better than ever before and that good judgment is soon shown. The public should be taught or re-taught, for its own good, the qualifications of the general practitioner. It should know his ability in the treatment of their ailments, and, when conditions exist outside his sphere, in the selection of specialists and hospitals. He can spare them the expenditure of large sums of money for unneeded laboratory

and other technical procedures. His knowledge of the expenses and probable duration of hospital care as well as of the families' financial condition will assist them in the selection of accommodations which they will be able to afford. Respect for his authoritative knowledge as the physician of the family would spare the public the greater part of those millions of dollars wasted on useless remedies, drugs and appliances. The greatest disadvantage on the part of so many family physicians in the past has been the lack of good hospital associations. Now there are few doctors not so associated, and facilities hitherto denied are at his command.

In the less populous sections of our country he is in great demand and his success unquestioned. It is a sad reflection that his work is in part lost to us because we grow so large in the cities.

#### *Governmental Relationships*

No one would deny to the power of government the results that have been accomplished by it. No one may deny that in medical conditions affecting the general public as such, the police power of the government may be invoked and supersede all the rights of physicians. National or local emergencies, plagues or epidemics, the transmission of disease from other countries or from different states, quarantine and public sanitation and even the custodial care of mental diseases and some contagious diseases, and the study of the etiology of these abnormal conditions require governmental power and authority. No one would dispute the *right of local government* authorities to the study of diseases of its locality and the dispersion of its knowledge, nor supplying when necessary the information and the means to prevent the spread of disease. Some there are in addition who possess a blinding faith in government to do much more than that—even to individual prophylactic measures and remedial care of all the sick. With the knowledge in our possession of the efforts of foreign countries for many years in the medical care of sick individuals we entertain a very different opinion. Experience and study of these many methods before us, whether they be State Medicine, the plans of socialism, or Compulsory Health Insurance, have shown us their weaknesses and their inapplicability to ourselves. In no one of these for-

eign countries do the public health, the loss of sickness time, or the mortality rates compare favorably with our own. Furthermore, in no country is the quality of medical care given to the under-privileged individual, and unrestricted free quantity of treatment, equal to our own. Mixed with many cash benefit clauses there has always accompanied such schemes a vast increase in the number of hypochondriacs, neurasthenics and malingerers, very little or no provision for individual preventive care, and annually higher mounting costs. The very first scheme was originated for political purposes by Bismarck and ever since his time the number of employees and lay help have far exceeded the number of medical people and themselves created a powerful political group.

In this country we are gradually learning that government can not do all things well. The recent noble experiment in the personal habits of people was not very successful, and attempted political control of other personal relations and habits is becoming more and more dubious. Our President has called all such political attempts at control in medicine *failures* and has expressed his determined opposition to them. In one of the best of the plans—in England—the amount and duration of service is restricted and the number of benefactors limited. Only those on payrolls are included and not the real indigent. For them the dispensary and hospital work still survives. Consultation and specialist service is not generally promoted, and the strictly indigent still constitute a social problem. As the work of the doctor there increases in quantity the quality perforce is diminished. The recent distinguished visitor from the British Medical Association to our National Convention (Lord Horder) admitted that in the past twenty years respect for the doctor and his prestige in England have been decidedly lessened.

Many of the people are helped by these plans—many doctors, despite the obstacles, strive to do good work. Despite our previous efforts and results, our conditions here are not perfect, do not meet our fullest desires, and by certain government aid and cooperation with our profession could be made better.

We are willing and anxious and able to assist in obtaining better social conditions. Our profession has not been idle. There is

no one plan that is suitable for all parts of this country. Several attempts, through trial and error, have been holding much promise. We have been told that many new laws with radical changes may be proposed in the new Congress at Washington, regulating the subject of medical care. Less enthusiasm for such proposals seems to exist. It even seems that a proposed law may be introduced, backed by high authority and drawn after much conference and study with the medical profession and embracing (as in our Workmen's Compensation Act) many of the principles we hold essential. The principles underlying some—a very few—phases of the government relief services, though incomplete and unsatisfactory in many details, point to some of the ways of improvement. Every individual sick person should be cared for by a doctor of his choice. Every sick indigent person, whether at his home, at a clinic, or at a hospital, should receive all necessary care and that care should be paid for by the Government, as it is rendered. No Government body, nor any lay group, nor any bureau, should dictate the amount of treatment to any one sick, the number of visits that may be made to a patient, or the kind and cost of medicine that may be given. They may not specify the indications for hospital or operative care, the kind of operations that may be performed, and who may perform them, and what hospitals may render service. These are strictly medical questions. They can be answered only by the doctor in attendance whose scientific medical actions may be endorsed or disapproved only by members of his profession.

There must be no plan which mixes a cash benefit payment to the sick varying with the duration of illness. In every country this has bred a plague of malingerers and hypochondriacs and floods of unworthy, dishonest demands.

The medical profession can not and should not longer bear the burden of giving this care without remuneration. This is a duty of the public at large. It was reported that the free care given by doctors in the voluntary hospitals of New York City a year ago at lowest estimates was worth between forty and fifty million dollars a year, and this did not include municipal hospitals, dispensaries, or the charity of private physicians.

Neither local nor State Government, ex-

cept as mentioned earlier, should have any part in the *treatment* of the sick individual. The preventive work of our Board of Health is greatly dependent on the physician of the community, and it should be given by the private physician, paid by the community for work done. Every government medical measure should *only* be undertaken with the advice and co-operation of the medical profession. Lay groups able to contribute advice and monetary or personal assistance must be respected for their contribution and assistance but must not have predominant influence or control in medical matters.

There is a place for lay groups in social, economic and educational branches of health and sanitation. There is an immense field in which such groups may assist the doctor and aid the sick, but there is no place nor time for the workers in any lay group to arrogate to themselves the right to treat a sick individual, and neither social workers nor nurses, nor financiers, nor hospital trustees may tell a physician how he must treat a patient.

Organized medicine, with its knowledge and strength, will always assist and co-operate with governmental authorities for the welfare of the people, but will also vigorously oppose every proposal that it deems unwise and harmful.

#### *The Permanency of Medical Fundamentals*

In the most revolutionary changes of new or radical governments the need of medicine and its doctors is never questioned. Yet, medicine has not reached the limits of its possibilities, nor will its opportunities for usefulness ever be exhausted. As individuals doctors will ever strive to expand that usefulness and medical societies for the dissemination of medical knowledge will continue to justify their centuries of existence.

It may happen that plans of government in phases of social security may impede temporarily the advance of medical progress, and change the forms and methods of practice. Yet the instinct of self-preservation can never be eradicated, and our people, through experience, have learned much. We know that when the life of a man is endangered—or the lives of those dearest to him are imperiled—the man will seek nothing but the highest and best. The threatened changes in forms of prac-

tice for delivering service should not dismay. Medicine with all humility knows not only what it possesses but it also knows how much more it seeks, and it knows that its treasures can be bountifully and unrestrainedly distributed without diminishing the supply.

And though the forms of practicing

medicine and distribution of its benefits may again change through the years, as they have often done in the past, medicine, vitalized by the motives and ideals of the doctor, the principles underlying his work and the great good inherent in them, will continue its beneficent work through the ages.

## Clinical Notes

### TRUE MENOPAUSAL PHENOMENA AND NEUROSIS

—Abner I. Weisman

—Continued from page 75

tients form a large part of the clinic and by their very nature these patients are of a more nervous temperament than their Nordic or Anglo-Saxon friends.

**Summary:** In the treatment of the menopause, sterile saline injections and sugar tablets were administered to a series of cases referred to the menopause clinic. Of these patients 45 per cent were found to be neurotic, by reason of their favorable response to placebo treatment. These patients were eliminated from the endocrine treatment accorded to the true vasomotor menopausal cases who were then given the estrogenic hormones. This large percentage of false menopause cases is probably due to the type of patient treated in this clinic, since emotional instability plays a large part in the make-up of the Latin temperament.

119-14 UNION TURNPIKE.

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1. Editorial: The Rôle of Estrogenic Substance in Tumor Formation. Jour. Amer. Med. Assn. 106: 1093, March 28, 1936.
2. Successful Hormone Treatment of the Menopause. Weisman, A. I.: Clin. Med. and Surg. 43: 129, March, 1936.

## Miscellany

### CLINICAL NOTE

In ONE of our Eastern cities a medical man was recently encountered who carried in his window an announcement to the effect that consultations were fifty cents, and home calls, during the day and until 10 p.m., one dollar. A card issued by him bore the following information:

Special Attention to Bronchial Troubles

Sunray Treatments .....	\$1.00
Colonic Irrigations .....	3.00
Chiropractic Adjustments ..	1.00
Removing Pimples .....	1.00
Injections for Varicose Veins	2.00
All Treatments One Dollar and Up	

Further investigations revealed this man to be a graduate of one of our best schools. He is registered by the State but is not a member of his county society. A cynical critic suggests that the fifty-cent fee is only a smokescreen and that the client does not get out at that price. That clue has not been run down. This critic sees the spectacle as a racket.

### A PROBLEM FOR AN EARLY NEW ENGLAND RAILROAD SURGEON

Among the rest one Thomas Brown  
Had his neck so distorted  
That o'er his back his head hung down  
And was almost inverted.

—*Every Day But Sunday*

By Jennie F. Copeland  
(Stephen Daye Press, Brattleboro)

# Cancer

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## THE SYMPTOMATOLOGY OF EARLY CARCINOMA OF THE STOMACH

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Rochester, N. Y.

RECENTLY Minnes and Geschickter (1) studied a series of 541 cases of carcinoma of the stomach with the hope of learning a few features that might aid in reducing the mortality from this disease. When we were asked to discuss the symptoms of early carcinoma of the stomach we took the liberty of using this excellent review and careful analysis of this fairly large group. In addition, we studied fifty cases occurring at the Strong Memorial and Municipal Hospitals.

With all of this we have had difficulty living up to the title of this paper. It is not easy to find symptoms for a disease that is insidious in onset, a disease that is usually well advanced before it manifests itself clinically even by the mildest symptoms. The symptoms that do occur in early carcinoma are probably not manifestations of the disease process itself but are probably based upon the mechanical disturbances due to the location of the lesion. If we are to rely upon the symptomatology of the actual cancer then in most cases we shall be too late for any real benefit.

To attack this problem we shall review the clinical features that were found in both series mentioned. Seventy-six per cent of the cases in Minnes and Geschickter's series occurred between the ages of

forty-four and sixty-six, 10.7 per cent before forty, and 2.6 per cent after seventy. The youngest was twenty-five and the oldest was eighty. In our series two cases or 4.0 per cent occurred before age forty. Twenty-five or 50.0 per cent of the cases occurred between the ages of forty to sixty six or 12.0 per cent occurred after the age of seventy. Males greatly outnumbered females in both series; 76.2 per cent in the large group and 66.0 per cent in our small series were males.

The duration of symptoms prior to treatment in the 541 cases studied by Minnes and Geschickter showed that in the majority of cases the symptoms had been present for from six months to one year. The same was true of our series and eleven of our cases had had symptoms for a year or longer.

Minnes and Geschickter divided the symptoms into three main types, (1) dyspeptic, (2) cachectic and (3) ulcerative. This covers most of the cases if we add the anemic to the cachectic group. There is, however, a group that are asymptomatic until metastases have developed. The majority of cases occurred in the first group, the dyspeptic, or people in whom some changes had occurred in the working of their digestive tract. These symptoms varied from a feeling of mild discomfort and sense of fullness after meals with loss of appetite to acute gastric pain, nausea, vomiting, and occasional hematemesis or tarry stools. Thirty of our fifty cases belonged to this group. In the cachectic

From the Department of Medicine, the University of Rochester School of Medicine and Dentistry. Read at the Clinical Session of the Twelfth Annual Meeting of The New York State Committee of the American Society for the Control of Cancer, Genesee Hospital, Rochester, N. Y., December 8, 1936.

group the patients first complained of weakness, fatigue, loss of energy, etc., before any symptoms referable to the stomach occurred. Loss of blood was the cause in some, giving the appearance of anemia. This was a small group in both series, only five of our fifty patients belonging to it. The ulcerative or ulcer-mimicking group presented symptoms that resembled those of benign gastric ulcer. Seven per cent of the large series and six or 12.0 per cent of our small series gave an ulcer syndrome.

Pain was present in about 75.0 per cent of the cases of the large series and in 72.0 per cent of our cases. It had no distinctive character and varied in location, intensity and kind.

Constipation as one of the early symptoms was present in eleven of the fifty patients in our series.

The appetite was greatly affected in twenty-six of our cases and there was a significant loss of weight in thirty-eight of our fifty patients (76.0 per cent). There was a rapid loss of weight in 91.0 per cent of the Minnes and Geschickter series.

A mass was found in forty-three per cent of the large series and in forty-eight percent of our cases. Occult blood was present in twenty-nine of thirty-six cases in which it was recorded in our series, and in 58.0 per cent of tested cases in the large group. Achlorhydria was present in 73.0 per cent and free acid in 27.0 per cent of the patients in the small group who had a gastric analysis. In the large group 64.6 per cent had no free acid after a test meal and varying amounts of free acid was present in 33.4 per cent; hyperchlorhydria occurred in only 2.6 per cent.

After reviewing these clinical data, we are now in a position to ask what are the symptoms of early carcinoma of the stomach or even what are the early symptoms of carcinoma of the stomach?

The answer is that there are no known definite pathognomonic symptoms of early carcinoma of the stomach and yet there is a great responsibility upon the physician to detect carcinoma of the stomach when it is early and operable. Paradoxical as it may seem, this can be done in a good number of cases. We are going to do it not by waiting for symptoms characteristic of cancer of the stomach to occur, by which time it will be too late in most patients, nor are we going to do it by waiting for physical signs to develop. But we can

do it by obstinacy in our search for early cancer of the stomach. Any patient past the age of forty who develops any dyspeptic symptoms no matter how mild, even the slightest distaste for food, any mild distress or discomfort after eating, any ulcer-like symptoms, any anemia, any weight loss must have a complete study, and the most important is the röntgen series. If the first röntgen study fails to reveal a lesion, we must not hesitate to repeat it if the symptoms persist.

Loss of weight, anemia, occult blood in the stool, and achlorhydria are not symptoms of early carcinoma of the stomach, although any of these may occur as the early symptoms of carcinoma of the stomach in some cases. Let us repeat that, at present, we must rely upon early and repeated röntgen studies to detect early carcinoma of the stomach. We must not treat these patients symptomatically, no matter how mild the symptoms may seem. Don't forget the pitfalls of the ulcer-complex. Never treat a patient past forty years of age for ulcer without röntgen study of the stomach just because he or she may have a typical ulcer picture. The patient may have an early carcinoma in the operable stage. Don't treat a gastric ulcer medically without repeated x-ray studies. Don't continue to treat a gastric ulcer conservatively if its niche does not disappear, as confirmed by röntgen study, within six to ten weeks. It may be cancer. Don't hesitate to consult with a surgeon who is experienced in gastric surgery. Remember that any symptom referable to the gastrointestinal tract may be the result of an early carcinoma of the stomach.

#### Reference

<sup>1</sup> Some Clinical Features of Carcinoma of the Stomach, J. F. Minnes and C. F. Geschickter, Amer. Jour. Cancer, August, 1936, 27:740.

#### Peace—It's Wonderful!

He (Father Divine) preached against doctors and dentists. This helped keep down outside expenses. "Father is the Doctor," became the refrain of one of the heavenly songs. Since he established his Harlem Heaven, records of venereal, tuberculosis and cancer clinics show that scores of Negroes who once received treatment no longer receive it. Death, says Father Divine, cannot come to the true believer. If it comes, it proves he is not a true believer.

—The New Yorker

# Economics

Department Edited by Thomas A. McGoldrick, M.D., LL.D.

## COMPULSORY HEALTH INSURANCE AND DISEASE CONTROL

FREDERICK L. HOFFMAN, LL.D.

FOR the social security program of the present administration, including its larger aspects of compulsory health insurance of American wage workers and low salaried wage earners, European precedents are relied upon for guidance, particularly the system in vogue in England and Wales and Scotland. The proposal rests upon the theory that vast benefits will result from such a system, for which compulsory contributions will be collected on a stated scale and dispensed by local bodies throughout the country. This would involve the establishment of a vast bureaucratic machine, the magnitude of which would be considerable. Contributions are to be collected by deductions from the current wage, to which a stated proportion of federal and state aid will be given by way of supplementary assistance. It is claimed that under such a system the mass of wage earning population would receive decidedly better medical attention than at present is the case.

### Death Rate Ultimate Test

In practice, however, it has been found that the bureaucratic system established under such a method involves countless complications which hinder rather than help the progress of scientific medicine for the benefit of the people. The medical profession would be divided into two classes, or those practicing state insurance and those who continue under a system of free competition in private practice. It is obviously a question of evidence as to which system is preferable for the benefit of the people.

Hence for the present purpose analyses of comparative death rates are presented

for England and Wales and Scotland on the one hand and the United States on the other, for the year 1934, since the death rate is the ultimate test of skill and attention in medical practice. In what follows only official reports of the mortality of the different countries have been used.

The first two articles compare the mortality of England and Wales and the United States, the third compares Scotland and the United States, and the fourth summarizes certain general evidence derived from current medical publications.

### Regimentation

The proposed system of compulsory health insurance is fundamentally opposed to our American conceptions of life and democracy with each and every one free to develop traits of competence and protect his own interests in sickness and health. The paternalistic system of Europe is un-American and opposed to the best interests of the population. The system would lead to the regimentation of the medical profession, lower the standards of medical practice, impose heavy burdens on the family budget, and produce results less satisfactory than the present system. The colossal sums that would be collected in the way of contributions would unquestionably be made the football of politics, and any doctor in the system would be compelled to concern himself, more or less, with political questions affecting his interests rather than follow his professional bent in the development of the science of medicine and make the interests of his patients his sole concern.

Advocates of the system are chiefly social service workers whose philosophy of government is fundamentally opposed to that which has prevailed in the past and aims to bring about lay control of medical

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practice regardless of all pretenses to the contrary. Just as Great Britain modelled its system of compulsory health insurance after German methods of social control, it is now proposed to model an American system after the British. Once such a system is established it is next to impossible to repeal it or bring about profound modifications. It becomes a part of the everyday life of the people who thus enter into bondage of the State in a manner involving the highest considerations of public welfare and social progress. What follows is based on many years of impartial study of the situation in England and on the Continent of Europe where compulsory health insurance has been in vogue for many years.

In the event that an American system becomes established it would unquestionably follow British precedent rather than German, Austrian or French which are less applicable to our situation.

### *England and Wales*

The claims made for compulsory health insurance as to the value of medical benefits to the insured population have never been adequately supported by an appeal to national vital statistics showing a decided fall in the mortality in those diseases which would seem to be subject to human control. On the assumption that compulsory health insurance is of the benefit claimed for it in the case of huge masses of insured wage earners, the national death rates for specific causes should make a much more favorable showing than the corresponding death rates in countries not operating such a system of wage workers' insurance.

To illustrate this important assumption, it seems perfectly admissible to take the national figures for England and Wales and the United States as an example, and the comparative data following rest upon this theory which provides the only test available, since national figures for non-fatal illnesses are not available. Since the latest official figures are for 1934 that year has been selected for the present purpose.

As a rule only the diseases of adult life are considered, and by preference only such as admit of the largest measure of social control by the application of prompt remedial or curative measures either under a system of health insurance or by unrestricted medical practice as it prevails in this country. Since comparison of all the

two hundred scheduled causes of death would involve many diseases of small importance, I have selected such as seem most suitable for the purpose in the light of long experience with health promoting agencies.

It may not be out of place to point out in this connection that all of the great modern health-promoting organizations, such as the National Tuberculosis Association, the American Heart Association, and other organizations having to do with cancer, malaria, asthma, diabetes and mental hygiene, as well as the great National Safety Council for the prevention of accidents, had their origin in this country under the individual practice of medicine, while their beneficent mission has spread from here to all the great nations of the earth, including those in which health insurance is in operation.

### *Comparative Vital Statistics*

Now to examine comparative vital statistics for various diseases for the year 1934.

Erysipelas prevailed in England and Wales at the rate of 3.6 per 100,000, while in this country the rate was 1.5. This is a highly infectious disease and requires prompt medical treatment for efficient control and reduction in spread. In England and Wales the mortality has increased from 2.6 in 1930 to 3.6 in 1934, while in the United States the rate has decreased from 2.1 to 1.5.

Respiratory tuberculosis prevailed in England and Wales in 1934 at a rate of 63.5 per 100,000. The corresponding rate for this country was 51.2. There was a decrease in the rate in England and Wales from 73.9 in 1930 to 63.5 in 1934, and in this country from 63.4 to 51.2. Disseminated tuberculosis prevailed in England and Wales to the extent of 2.8 per 100,000 compared with a rate of 1.0 in this country. There has been a decrease in the rate in England and Wales from 3.9 in 1930 to 2.8 in 1934, and in this country from 1.4 to 1.0.

Purulent infection, or septicemia, prevailed in England and Wales at a rate of 2.0 per 100,000 in 1934 and 0.7 in this country. The decline in the rate in the two countries during the last five years has been about the same.

The cancer death rate in England and Wales was 156.3 per 100,000. For this country the rate was 106.3, a very marked difference. Cancer of the male genito-

urinary organs prevailed at a rate of 17.7 in England and Wales and 9.0 in this country. This group includes the so-called mule spinner's cancer which prevails in England and Wales but not in this country. The mortality from cancer of the skin is about the same in the two countries, or 2.7 and 2.6 respectively.

The rate for rheumatic fever was 3.4 in England and Wales and 1.8 or about one-half, for this country. The English death rate has declined from 3.8 in 1931 to 3.4, while in this country the decrease has been from 2.5 to 1.8. This is a disease which requires careful medical supervision of the patient and prompt attention to his needs. The same is true of chronic rheumatism and osteoarthritis which prevailed in England and Wales at a rate of 7.8 compared with a rate of 1.3 for this country. The reasons for this marked difference are not fully understood but they are possibly partly climatic. Instead of a reduction in the rate there has been an increase in England and Wales from 7.5 in 1930 to 7.8 in 1934, while in this country the rate remained stationary.

Anemia-chlorosis showed a death rate of 6.6 for England and Wales and 3.1 for this country, or less than one-half. The rate increased in England during the last five years from 6.0 to 6.6, while in this country there was a decrease in the rate from 3.7 to 3.1.

Cerebral hemorrhage, apoplexy, etc., was much more common in the United States, the rate having been 85.5 in 1934 compared with a rate of 64.7 for England and Wales. The rate decreased in England and Wales from 65.0 to 64.7, and in this country from 88.8 to 85.5.

Other diseases of the nervous system show a decidedly higher rate for England and Wales, or 7.3 per 100,000 in 1934, compared with a rate of 3.1 for the United States. The reduction in the rate has been about the same for both countries.

Disease of the ear and mastoid sinus, the medical neglect of which is of serious consequence, prevailed in England and Wales at the rate of 4.1 in 1934 compared with 3.2 in this country. The rate has increased in England and Wales from 3.5 to 4.1, while the rate for this country declined slightly or from 3.3 in 1930 to 3.2 in 1934.

Acute endocarditis prevailed in England and Wales to the extent of 3.0 per 100,000 in 1934, and in this country at a rate of 2.8. Chronic endocarditis and valvular dis-

ease prevailed at a rate of 58.1 in England and Wales and 45.7 in this country. There was a reduction in the rate in England and Wales from 65.7 to 58.1, and in the United States from 56.1 to 45.7.

Diseases of the myocardium are much more common in England and Wales than in this country, the rate having been 163.2 per 100,000 in 1934 in England against a rate of 108.1 for this country. There has been an increase in the rate in both countries, or from 120.9 to 163.2 in England and from 97.7 to 108.1 in the United States.

The rate for diseases of the coronary arteries and angina pectoris was 26.4 per 100,000 in 1934 in England and Wales and 42.8 in this country. The rate increased from 14.8 to 26.4 in England and from 24.1 to 42.8 in this country. The increase may possibly be the result of changes in classification for medical registration purposes.

For disordered action of the heart the rate in England and Wales in 1934 was 6.7 compared with a rate of 0.7 for this country. There was an increase in the rate from 5.3 in 1930 to 6.7 in 1934 in England and Wales and from 0.6 to 0.7 in this country.

Arterio-sclerosis likewise shows a decidedly higher figure for England and Wales, or 54.4 in 1934, compared with 18.0 for this country. While the rate increased in England and Wales during the last five years from 47.5 to 54.4, it decreased in the United States from 18.4 to 18.0.

#### *Higher Death Rates in England*

In the diseases thus far reviewed, it is therefore shown that with only two exceptions the rate was higher in England. The rate of mortality decrease is greater in this country than in England and it may be recalled that the original Act starting health insurance stated that it was "an Act to provide for insurance against total loss of health and the prevention and cure of sickness, and for purposes incidental thereto."

As regards the prevention of sickness it is shown that of the diseases enumerated, most come under health insurance practice as a matter of routine experience, with much more favorable results shown for this country than for England and Wales.

There is no better test than the comparative mortality figures of these two

—Continued on page 108

# Contemporary Progress

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## Otology

### *Pathologic Changes in the Middle Ear in Patients with Normal Hearing and Those With a Conduction Type of Deafness*

LeR. M. POLVOGT and J. E. BORDLEY (*Annals of Otology, Rhinology and Laryngology*, 45:760-768, September, 1936) report a study of the pathological changes in the middle ear in persons with normal hearing and in persons in whom the bone conduction time was greater than the air conduction time (negative Rinne). For the group with normal hearing, the persons selected were those showing normal responses to the tuning fork tests and hearing all tones at an intensity of less than 20 decibels. For the group with negative Rinne, all were included in which a 256 or a 512 d.v. steel fork showed the bone conduction time greater than the air conduction time. Comparing the bone conduction time of these patients with normal bone conduction time, it was normal in all but one instance, in which it was a few seconds shorter. The time elapsing between the hearing tests and the death of the patient and removal of the temporal bones was less than six weeks in over half the cases. In the ears with normal hearing the pathological changes in the middle ear were slight, chiefly in the tympanic membranes; none showed any pathological changes in the ossicles; many of the normal ears showed a few bands of mucous membrane across the fossula of the oval window or the niche of the round window. In the 20 ears with negative Rinne, the principal lesions in 16 instances were those characteristic of long

standing chronic infection with the resultant formation of scar tissue; a cholesteatoma was present in 3 of these ears; 2 ears showed evidence of long standing tuberculous infection; one typical otosclerotic lesions around the footplate of the stapes; and one a new growth in the middle ear. Those showing the greatest decrease in air conduction on the hearing tests showed the most extensive pathological changes in the middle ear. In the ears with negative Rinne, the drum showed extensive lesions in 19 ears; the anterior-superior part of the middle ear showed pathological changes in every instance; and the epitympanic recess in 19 instances. The most striking differences between this group and the normal hearing group were in the ossicles. Eighteen of the 20 ears of this negative Rinne group showed lesions involving the ossicles, usually adhesions between two or more ossicles, or adhesions between the ossicles and the walls of the middle ear; erosion of the ossicles was common; the otosclerotic case showed ankylosis of the footplate of the stapes. The authors are of the opinion that lesions that interfere with the normal movement of the ossicles are the chief cause of a reduction of air conduction without changes in the bone conduction time, giving a negative Rinne test.

### COMMENT

We consider this one of the most important contributions to otological literature that we have read in some time. Naturally, we are surprised that practically no pathological changes were found in patients who had normal hearing. It is seldom that one is in a position where one can receive fresh autopsy material so that no

degenerative changes are present at the time that the examination is made. What interests us most is that adhesions between the ossicles themselves or between the ossicles and the oval window were present in so many cases and that pathological changes could be found in these small bones. This confirms the opinion that we have given for so many years that conduction deafness is caused by middle ear lesions. Of most importance is that so many of these cases are diagnosed as otosclerosis when there is nothing in the pathology that would indicate such a condition.

H. H.

### Reparative Processes in the Membrana Tympani

W. D. STINSON (*Archives of Otolaryngology*, 24:600-605, November, 1936) notes that while a minute perforation of the tympanic membrane may fail to heal, yet a "new growth" membrane may form after a radical operation on the mastoid. In a study of the proliferation of the drum membrane in a series of cases by means of markings with India ink in various locations, the author has come to the following conclusions: The epidermis on the membrana tympani does not proliferate and desquamate "haphazardly." It migrates on its original plane from the anterior margin to the posterior wall of the canal, and along the wall of the canal to the meatus. This probably explains why there is no evidence of scarring of the drum membrane of an adult who has had repeated incisions of this membrane in childhood. The epidermis of the membrana flaccida "fans out" over the wall of the canal, as shown by the breaking down of a drop of India ink placed on this membrane into small particles that move rapidly. The proliferation of the epidermis around the processus brevis usually proceeds in whorls, the movement tending to be toward the superior wall of the canal, rather than the posterior wall; this is shown by the movements of a dot of India ink placed just anterior to the short process. The author has never observed proliferation from the canal toward the drum. He has found Cargile membrane or the ordinary fish skin condom an ideal artificial membrane to aid the closure of perforations of the drum membrane. Such an artificial membrane must be applied in a dry ear with no inflammatory reaction, and

must be protected from external moisture. The membrane is applied moist, and becomes tense on drying; the patient notes a definite improvement in hearing. As the proliferation of the epidermis proceeds this artificial membrane may be ejected; or it can be removed by moistening.

### COMMENT

This study is extremely interesting. There is no way of indicating whether a drum will heal or whether it will not. Spontaneous healing will often take place during an acute inflammation when we would prefer the drum to remain open. On the contrary, permanent perforation will occur for no known reason. Sometimes these perforations can be stimulated, so that the drum will heal over, by touching the edges with trichloracetic acid. In other cases, we have used the procedure suggested—covering the perforation with Cargile membrane or some similar material.

H. H.

### Otomicroscopy in the Living

E. LÜSCHER (*Journal of Laryngology and Otology*, 51:779-786, December, 1936) has devised an ear microscope which can be used in the same way as the ordinary otoscope. The ordinary lenses show only objects of about 0.1 mm., but the otomicroscope increases visibility to 0.01 mm. From an experience of ten years with this otomicroscope, the author is convinced that it is of definite value in diagnosis. The otomicroscope shows the normal tympanic membrane to be very even, smooth, "almost structureless" and of high brilliancy. The superficial network of vessels is clearly seen; and also the blood stream within the vessels. An absolutely normal tympanic membrane is rarely seen, in the author's experience; usually it shows dull patches, or "thickenings and thinnings in many forms" which may lead to degenerative changes. These do not appear to be of clinical importance. In acute otitis media, the otomicroscope shows that there is an uneven swelling of the dorso-posterior part of the tympanic membrane rather than an actual bulging. This swelling is due to local edema and incipient abscesses of the membrane. The otomicroscope gives a better idea of the acuteness of the inflammation; pulsations may be seen that indicate an active hyperemia, which are not

clearly seen with the usual otoscope. In mastoiditis the membranes show a pale red color and a web-like structure of the pars tensa. This peculiar weblike or marble-like appearance of the pars tensa the author has observed only in cases of mastoiditis "ripe for operation," and considers it of definite diagnostic importance. All cases of mastoiditis do not show this sign, however, so its absence does not exclude this condition. In early tuberculosis of the middle ear, the otomicroscope shows small multiple nodules on the drum membrane with signs of a sub-acute inflammation. With the ordinary otoscope these nodules cannot be distinguished, and early tuberculosis is difficult to differentiate from common otitis media. These nodules are not real tubercles as they usually disappear; and true tuberculous foci of the drum present quite a different appearance. Shrapnell's membrane and any pathological changes in it can also be clearly seen with the otomicroscope.

#### COMMENT

*Very few otologists appreciate the advantage of a magnifying otoscope or an ear microscope. For years we have been using an apparatus which magnifies the image eight to ten times and we have found it invaluable. Apparently the instrument discussed by the author gives even greater magnification. The advantage of the instrument is in cases where one wishes to make a more definite study of a pathological condition. In many cases one cannot get an accurate picture of the ear drum or the middle ear through the ordinary speculum or the ordinary otoscope, but the ear microscope shows the picture very clearly. We can hardly agree that one can make a definite diagnosis in cases of mastoiditis. However, we do feel that the seriousness of the inflammatory process in the middle ear can be more definitely determined.*

H. H.

#### Acute Streptococcal Infections of the Middle Ear

W. M. MOLLISON (*British Medical Journal*, 2:615-617, Sept. 26, 1936), in his experience with streptococcal infections of the middle ear, has found that they are caused chiefly by acute infections of the upper respiratory tract, such as "so-called influenza," tonsillitis, severe colds, etc. Bathing in fresh water public baths is also

a common cause of acute otitis media. The severity of streptococcus infections of the middle ear varies widely. During epidemics of influenza, the disease may run a rapid, often fatal, course with mastoiditis and meningitis, while in some cases the patient is only slightly ill, and if the mastoid cells become involved, operation can be done "without causing the surgeon a minute's anxiety." The author is in favor of incision of the drum membrane in all cases of otitis media with pain and general bulging of the membrane, if the temperature is high. While the otitis media may subside without this procedure, there is more danger of subsequent deafness. In cases of streptococcal otitis media that develop mastoid symptoms, the author is of the opinion that an emergency operation is not necessary. It is preferable to build up the resistance of the patient, with the administration of the appropriate serum (after culture of the discharge), or with blood transfusion. Sometimes he has found that a blood transfusion results in cure without operation even when mastoid tenderness is present. Pentnucleotide injections, with or without blood transfusion, have also proved of value in severely ill cases as a preoperative or postoperative measure. Illustrative cases are reported.

#### COMMENT

*The streptococcus is responsible for the majority of acute infections of the respiratory tract and certainly of the acute ear. In this country, almost all cultures show *Streptococcus hemolyticus*. We regret that the author does not feel that an emergency operation is necessary where there are definite mastoid symptoms. Of course, the type of infection is not the only thing to consider. One must have considerable clinical experience to determine the pathology in the middle ear, and he can be guided to a certain extent by x-ray pictures. Although we believe in being conservative about operations on the mastoid, one can carry one's conservativeness too far, and when one does, neither blood transfusions nor sera will be of much value.*

H. H.

#### Nerve Deafness on an Endocrine Basis

E. ALFÖLDY (*Monatschrift für Ohrenheilkunde und Laryngo-Rhinologie*, 70:1281-1286, November, 1936) has become

convinced that the nerve deafness with tinnitus and dizziness that occurs chiefly in elderly or prematurely aged persons is, like old age itself, due to a disturbance of the endocrine balance, depending primarily upon the sex glands. He has treated such cases with anterior pituitary hormone plus testicular or ovarian preparations (according to the sex). These preparations were given intravenously, first the pituitary hormone alone three times a week for three weeks; then the pituitary hormone plus the sex gland preparation for the same period. In a few months treatment can be repeated, if necessary. In all the cases treated a definite improvement in the hearing and the tinnitus was obtained; and often an improvement in the general condition was noted. In younger patients, with the old age type of deafness, the same treatment is indicated, as in these cases there is undoubtedly an endocrine imbalance of similar type.

#### COMMENT

*Again we find that the pituitary gland is responsible for another condition. It is a worth while suggestion to administer anterior pituitary hormone in cases of deafness which are associated with old age. Of course, a general deterioration in hearing should not be called nerve deafness. As a rule, such deterioration is a part of the general body process.*

H. H.

## Rhinolaryngology

### The Effect of Estrogenic Hormones on the Nasal Mucosa

H. MORTIMER, R. P. WRIGHT and J. B. COLLIP (*Canadian Medical Association Journal*, 35:615-621, December, 1936) report studies on female monkeys and also clinical studies showing the relationship between the estrogenic hormone and the nose. In female monkeys the sexual cycle due to ovarian function is clearly marked by hyperemia and swelling of the skin of the perineum, and is also apparent in the skin of the face, of the nipple and of the back. The conchal mucosa was found to show redness and swelling coincident with these sexual cycle changes and unrelated to changes in temperature or chance nasal infection. The administration of estrogenic hormones caused similar redness and swelling of the nasal mucosa not

only in normal females, but also in castrates and in males; in immature as well as in mature animals. Careful observation of the nasal mucosa in pregnant women showed that redness of the nasal mucosa above normal limits of coloration is evident by the end of the fourth month and gradually increases in intensity; while swelling of the nasal mucosa is noticeable somewhat later, becoming marked by the end of the seventh month. Fifty per cent of the women showed epistaxis during pregnancy. In a family under the authors' observation the parents and all 9 children (7 of whom are girls) have marked atrophic rhinitis; the 4 youngest children have severe ozena. Cranial skiagrams showed that none of the family had a normal skull; the children also showed definite evidence of pituitary dysfunction. In a moderately large series of cases of atrophic rhinitis, the authors have found abnormalities of the cranium and other evidence of pituitary dysfunction in 80 per cent. In 2 of the female children in the family mentioned above, an estrogenic hormone preparation (estrin) in oil was applied to the conchae; weekly applications have been given for the past six months, while similar applications of the oil alone have been given to two others. The two patients treated with the estrin show a very marked improvement in the nasal condition with disappearance of the crusts, and also an improvement in general condition. No improvement has been noted in the "controls," treated with oil alone.

#### COMMENT

*We agree with the author that any derangement of the pituitary function may be evidenced by nasal symptoms. We have never observed anything definite in the mucosa of the nose in pregnant women, but perhaps that was due to our not paying any particular attention to those patients. It is an interesting fact that nosebleeds occurred in 50 per cent of the pregnant women examined. That the administration of an estrogenic hormone such as estrin can be of benefit in cases of atrophic rhinitis is worth while considering.*

H. H.

### Intranasal Phenol Application in Hay Fever

F. VISTREICH (*Laryngoscope*, 46:717-728, September, 1936) reports the use of intranasal phenol applications in the

treatment of hay fever. For such applications a concentrated U. S. P. phenol is used; both sides of the nose are treated at the same time; the excess of mucus is removed before and during the treatment with the nasal suction tube. The application is made with cotton applicators well soaked in the phenol solution, but not dripping when introduced; the applicator is "led" with moderate force over the entire mucosa except for the olfactory region; usually two fresh applicators are used on each side. Care must be taken not to allow the phenol to escape into the pharynx; the exposed skin areas are protected with rubber cement. When the application is completed a light cotton plug slightly moistened with alcohol is put in each nostril and the head is bent forward and down. The immediate local reaction consists in blanching of the mucosa, edema and rhinorrhea, sometimes accompanied by sneezing; there may be slight or moderate malaise for twenty-four to forty-eight hours, but no prostration or serious discomfort. In twenty-four to forty-eight hours, the edema begins to subside, and the nasal passages start to open. In three to five days the coagulum comes away (sometimes in small portions), and the mucous membrane becomes normal in color and texture. Twenty-eight cases were treated, 25 during the hay fever season; 24 were under observation for the remainder of the season after treatment. In 18, or 75 per cent., complete or almost complete relief (90 to 100 per cent.) was obtained; in 2 patients, 75 to 90 per cent. relief; and in 3 patients, 50 to 75 per cent. relief; only one patient failed to obtain any benefit. By intranasal swab tests with serial dilutions of pollen extracts (10, 100, and 1,000 units per c.c.), it was shown that the phenol treatment reduced the sensitivity of the nasal mucosa to pollen. Periodic tests showed that this reduced sensitivity was not permanent, but that it persisted on an average of seven to eight weeks. The author concludes that intranasal phenol application is an effective palliative treatment for hay fever. It is recommended especially for patients who present themselves for treatment during the hay fever season; for those in whom the allergic treatment did not give good results in past seasons; and for those who do not tolerate pollen injections well and show a tendency to constitutional reactions.

#### COMMENT

The use of phenol applications in the treatment of hay fever has received considerable attention during the past few years. A comparison has frequently been made between this method of treatment and ionization. We have stated before that although ionization has proved of value, in cases of hyperesthetic rhinitis, it has been of little value in the treatment of hay fever. We are interested to note that the author feels that he has obtained palliative relief in the treatment of hay fever cases by this method, when the patient has been treated during the attack. This is possibly due to the anesthetic effect of the carbolic acid. One must realize that there are certain dangers in using pure carbolic acid on the nasal mucous membranes and it is not too much to assume that a complete atrophy of the mucosa can take place.

H. H.

#### Ligation of the Internal Maxillary Artery in Patients with Nasal Hemorrhage

C. HIRSCH (*Archives of Otolaryngology*, 24:589-593, November, 1936) notes that hemorrhage from the posterior superior nasal cavity may be very severe and uncontrollable, especially in patients with high blood pressure. He reports 3 cases in which the bleeding was severe and could not be controlled by the application of methylamino-aceto-ortho-di-oxybenzol, galvanocautery, electrocoagulation, or other ordinary means. In 2 of these cases the patient had high blood pressure (over 200); and in the third case the bleeding followed an operation on the left ethmoid and sphenoid sinuses. In all these cases ligation of the intermaxillary artery was done by the method of Seiffert. All the patients made a good recovery. In this operation the maxillary sinus is opened from the oral cavity as in the Caldwell-Luc procedure. This method has the advantage of leaving no visible scars; is easy of performance for the surgeon "accustomed to operate with the aid of artificial light in deep-seated cavities"; and can be done quickly under local anesthesia with little additional loss of blood. The author is of the opinion that this procedure deserves to be more widely used than it now is.

#### COMMENT

In previous reviews we have spoken of the treatment of nasal hemorrhage and

commented upon our own experience. In the January, 1937, issue of this Journal we have published an article on this subject. Although the ligation of the internal maxillary artery may accomplish wonders in uncontrollable nasal bleeding, it is our belief that, when patients have a blood pressure of over 200, it is just as well for them to keep on bleeding until the pressure gets within normal limits.

H. H.

### Follow-Up of Patients Eight Months After Tonsillectomy

H. D. SMITH (*Archives of Otolaryngology*, 24:488-494, October, 1936) reports a follow-up study of 104 cases in which tonsillectomy had been done at the Massachusetts Eye and Ear Infirmary. In these 104 cases a previous study had been made of the pathological findings in the tonsils in relation to the preoperative diagnosis. In 45 cases the operation had been done primarily because of recurrent sore throat and colds, and in this group 86.66 per cent showed pathological evidence of chronic tonsillar infection; in a small group of patients (6.71 per cent) the tonsils were removed because they were considered to be foci of infection of some systemic disease; the tonsils were found to be infected in 85.71 per cent of these cases. Follow-up records were obtained from 61 or 59.22 per cent of the 104 cases eight months after operation. Of these, 90.16 per cent had fewer colds, and 81.96 per cent fewer attacks of sore throat. The few patients reporting more attacks of sore throat after tonsillectomy than before showed infected lymphoid tissue in the throat. Improved general health was reported in 88.52 per cent of the patients; and 78.69 per cent reported a gain in weight. Comparing results with the pathological conditions found in the tonsils, the author notes that 84.61 per cent of those whose tonsils he considered normal reported relief from their complaints, and only 75 per cent with a definite pathological process in the tonsils reported complete relief. The author concludes that his "diagnosis" of normal tonsils was too high, and re-examination of some of his specimens has confirmed this conclusion. In cases in which the tonsils had been removed on account of colds and sore throat, 80 per cent had complete relief from these symptoms; and 20 per cent partial relief. In the cases in

which tonsils had been removed because of ear trouble, all were improved, but none were cured. Of cases with nasal obstruction, 60 per cent were completely relieved. The patients whose tonsils had been removed as foci of infection all reported improvement; several stated they were "completely cured," but examination "did not bear out this happy report." The author has no sympathy with "promiscuous slaughter of the tonsil," but is firmly convinced that tonsillectomy (with adenoidectomy) is justifiable if careful history and examination shows evidence of infected tonsils associated with recurrent colds and sore throat, aural disease, nasal obstruction, enlarged tonsils, cervical adenitis or focal infection.

### COMMENT

We take it for granted that the author is speaking of tonsillectomy performed on adult patients. His paper seems to indicate that one must use judgment in deciding whether tonsils should be removed or not. In those cases in which a definite tonsillar infection is present, it cannot be determined by inspection alone. There is no doubt that decided improvement, both local and generally, will take place after the tonsils are removed. Moreover, removal of such tonsils should be advised as a preventive measure. The author remarks that some of the patients complain of more attacks of sore throat after the operation. We agree that such soreness is often due to infected lymphatic tissue which is still present. It is our policy to advise such patients to have deep x-ray therapy to the throat. After five or six of these treatments, the pain often disappears.

H. H.

### Spontaneous Bleeding in Peritonsillar Abscess

H. BURGER (*Hals-Nasen- und Ohrenarzt* (27:281-284, November, 1936) notes that at the Marburg University otorhinolaryngological clinic, 3 cases of peritonsillar abscess with severe bleeding were seen in five days in the winter of 1935-1936. Only 4 other cases of this type had been previously recorded in this clinic, which were reported by Sassenberg. In the 3 recent cases, the bleeding occurred after spontaneous rupture of the abscess, in 2 cases, and in the third case seven days after incision of the abscess. In all these

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3 cases, as in the previous 4 cases, a tonsillectomy was done promptly, without attempt to control bleeding by tamponade or ligature. This method gave good results in all cases. In the author's third case, histological examination of the tissue removed showed a prolongation of the large middle crypt of the tonsil on the side of the hemorrhage into the peritonsillar tissue, where the bleeding had evidently occurred; there was no large artery broken down, but the hemorrhage had evidently arisen from the erosion of numerous small blood vessels. These findings indicate the advantage of tonsillectomy as a method of treatment.

#### COMMENT

*There is no more distressing or worrisome condition than a severe hemorrhage associated with a peritonsillar abscess. In many cases, this is due to the erosion of a blood vessel situated in the wall of the abscessed cavity. It is almost impossible to control the bleeding by pressure or by tamponade and we question whether the removal of the offending tonsils will always arrest the hemorrhages. In one of our cases, an aberrant blood vessel connected directly with the internal maxillary artery and with the internal carotid. The hemorrhage was so severe that the patient died before anything could be done. One must also realize that abscesses somewhat similar to peritonsillar abscesses occur after tonsils have been removed. There is always an associated cellulitis. In such cases severe hemorrhage may take place and one is at his wit's end to know how to and one is at one's wit's end to know how to control it.*

## Obstetrics

### Alligation of Pain in Labor

F. V. EMMERT and S. GOLDSCHMIDT (*Journal of the Missouri State Medical Association*, 33:378-384, October, 1936) report the use of a new barbiturate—sigmomid—as an analgesic in labor. The chemical formula of the drug is sodium-amyl-beta-bromallyl-malonylurea. It is given rectally, and only after labor is definitely begun. In primiparae the medication is started when the cervix is dilated two and a half fingers, and in multiparae when the dilatation is one finger. A cleansing enema is given at the beginning of labor, and

when the necessary dilatation of the cervix is reached, the patient is placed on her left side, and a thin rubber catheter is introduced as far as possible into the rectum, through which the drug is slowly instilled. Sigmomid comes in solution ready for use; the best dosage in obstetric cases has been found to be 10 c.c. After the instillation of this solution, 4 c.c. of saline are injected through the catheter, and after its removal pressure is exerted on the anus for several minutes with a pad. The effect of the drug becomes noticeable within a few minutes and the analgesia lasts three to four hours and in some cases longer. In 45 cases delivered by this method (30 primiparae and 15 multiparae) good analgesia and complete amnesia were obtained in 80 per cent of the primiparae and 73.3 per cent of the multiparae; partial analgesia and amnesia in 13.3 per cent of the primiparae and 20 per cent of the multiparae. Most of the patients slept quietly, showing no restlessness. There was no maternal mortality; there were 2 cases of postpartum hemorrhage, both immediately controlled with infundin intravenously; there was one premature stillbirth; one case of asphyxia due to short umbilical cord around the child's neck (resuscitated); all the other infants were born alive and cried spontaneously. In most cases the duration of labor was shortened. The authors conclude that sigmomid given according to the technique described is a safe drug for use in labor in the hospital or in the home; and that it "approaches more nearly the ideal analgesia in obstetrics" than other drugs used.

#### COMMENT

*Nowadays women demand relief from the pains of childbirth. The physician must therefore be in a position to give this relief. What method he chooses makes little difference so long as he is thoroughly familiar with his method of choice. Morphine and/or scopolamine with or without nembutal is our favorite—after many years of "trial and error" with all kinds of obstetric analgesia. The ideal drug or method has not yet been discovered. Some are good; others not so good; all give some relief. The outstanding obstacle against the present use of "something" is lack of someone to constantly watch the patient. Expense! the old "fly in the ointment" of most hospital and home budgets. Some day, perhaps, we may have an efficacious*

*obstetric analgesic that will require no supervision. All hail that day!*

H. B. M.

*much more study by many more observers must be correlated to fill in many of the gaps now existing.*

H. B. M.

### *Signs of Ovulation in Women*

L. R. WHARTON (*Southern Medical Journal, 29:1215-1219, December, 1936*) discusses certain signs that he has found to be indicative of ovulation in women. A cervical mucoid discharge is frequently seen; it is not often profuse and rarely attracts the patient's attention. It usually forms a thick tenacious plug of mucus that fills the cervix. This plug may be blood-stained, and a more marked uterine bleeding may occur. This ovulatory bleeding will be unnoticed by the patient in most cases, and will be missed by the physician unless careful inquiry and even a visual examination is made. If vaginal washings are examined microscopic blood will be found when the patient is not aware of any bleeding at all. A certain percentage of women experience definite pain in the intermenstrual period at the time of ovulation. If endometrial biopsy is done in the last half of the menstrual cycle, the presence of typical secretory premenstrual endometrium indicates that ovulation has occurred and a corpus luteum is present; in women the changes in the vaginal epithelium as shown in vaginal smears are not as clear and constant as in the lower animals. The estrin content of the blood and urine is highest at the time of ovulation. In institutions where estrogenic substances can be measured accurately, this determination will often be of value. The author emphasizes the point that the study of ovulation has just begun, and that further study of the problem by many observers and coordination of their findings are necessary to "fill some of the gaps" in our knowledge.

#### *COMMENT*

*Wharton has done yeomanly work on the ovulation cycle. Theoretically many of his clinical observations are "skating on thin ice;" because, for example, there are so many reasons for mucoid discharge from the cervix, how is one to know that ovulation is the cause at a given time? There are many more such examples of uncertainty and although suggestive of ovulation they cannot be proven. However, we feel, as does the author, that the study of ovulation is only begun and therefore*

### *Radium Irradiation for Benign Hemorrhage*

C. C. NORRIS and C. A. BEHNEY (*American Journal of Obstetrics and Gynecology, 32:661-670, October, 1936*) report a follow-up study of 1,437 cases of benign hemorrhage treated by intra-uterine radium irradiation in the past twenty years at the University of Pennsylvania Department of Obstetrics and Gynecology. Of this series, 1,006 patients have been followed up for two years or more; and 300 of these for a period of ten to twenty years. In 967 cases in which a report was obtained in regard to menopausal symptoms, it was found that 59 per cent developed such symptoms after treatment; the percentage was much lower in patients under thirty years of age than in those older. Satisfactory results were obtained in 83 per cent; the proportion of satisfactory results was about the same in the cases with myoma as in those with functional hemorrhage. Three per cent developed recurrences or complications requiring treatment ten or more years after irradiation. In the 1,006 patients followed for two years or more, 11 or 1.09 per cent developed carcinoma of the genital tract. Cases for irradiation must be carefully selected; myomas in young women should not usually be treated by this method. The authors are of the opinion that too heavy irradiation has been employed, especially in younger women. Their aim is to modify the dosage so that hemorrhage will be checked without completely sacrificing the ovarian function. Results with such a dosage are less certain and less permanent, but they consider it the method of choice. Of the 1,006 women followed up for two years or more, 20 have become pregnant, with a total of 31 pregnancies; 15 living children were born; 13 fetuses were non-viable; 3 have not yet been delivered. Only 3 pregnancies (in 2 women) occurred in patients treated for myomas; the children were delivered alive in these cases. The low percentage of pregnancies and of living children in this series, the authors believe, is not necessarily due to the effect of the radiation. Myomas predispose to sterility; and in the cases of functional

hemorrhage the high proportion of sterility and of non-viable fetuses may be due to endocrine imbalance. The number of pregnancies following irradiation is too small to permit any definite conclusions to be drawn regarding the effect of the radiation on "the fate of the embryo."

#### COMMENT

The authors have obtained excellent results in a large number of cases, which simply means they knew their "job."

Where indications are right, there is no more satisfactory therapeutic agent for the relief of benign uterine hemorrhage than the correct use of radium. Inaccurate diagnosis, lack of proper appreciation of contra-indications and faulty technic invariably cause trouble. Be meticulous in details and ever on the alert when you use x-irradiation.

H. B. M.

#### Premature Rupture of the Membranes as a Means of Inducing Labor

E. D. PLASS and C. W. SEIBERT (*American Journal of Obstetrics and Gynecology*, 32:785-790, November, 1936) report the premature rupture of the membranes for the induction of labor in conjunction with oxytocic agents. This method was used in 681 deliveries; the presenting part was floating in 335 cases, fixed but above the spines in 300 others, engaged in only 46 cases. The technique of rupture varied somewhat in different cases, but was usually done with Allis clamps with special long curved handles; mercurochrome (2 per cent) was poured into the vagina. There were 5 cases of prolapsed cords; 2 of these infants died, and their deaths may be attributed to the procedure; otherwise there was no fetal death that could be attributed to it. The latent period between the rupture of the membranes and the onset of definite labor pains was longer than twenty-four hours in only 32 cases; in 398 patients it was less than one hour. Delivery was spontaneous in 642 cases (74.3 per cent); there were 21 cases with more or less severe postpartum hemorrhage; if the latent period was more than six hours, the incidence of hemorrhage was increased. In 24.1 per cent there was a fever of 100.4° F. or over, but this persisted more than twenty-four hours in only 9.1 per cent. There were no maternal deaths. The authors conclude that rupture of the membranes combined with

the usual oxytocic agents is a more effective and less harmful procedure for the induction of labor than other mechanical procedures used for this purpose. It should be recommended, however, "only where there is a definite indication for the termination of the pregnancy."

#### COMMENT

Your commentator looks upon premature rupture of the membranes as meddlesome obstetrics, except under very unusual circumstances. I am still "old fashioned enough" to believe, as well as teach, that the membranes should be preserved, except where there is a definite indication for premature rupture, until the cervix is fully or nearly fully dilated and the presenting part has plugged the inlet. Certainly premature rupture of the membranes is not indicated in inducing labor. That it will induce labor admits of no argument; that it is a dangerous procedure, in the vast majority of cases, most practical obstetricians readily admit. A good working maxim is "preserve the membranes until full or nearly full cervical dilation is obtained."

H. B. M.

#### Intervals Between Pregnancies of Mothers Giving Birth to Congenitally Malformed Children

D. P. MURPHY (*Surgery, Gynecology and Obstetrics*, 63:593-595, November, 1936) reports a study of the intervals between pregnancies in 581 families in which congenitally deformed children were born. Of the 2,146 pregnancies occurring in these families, 584 resulted in the birth of malformed children, 1,562 in the birth of normally developed children. It was found that the malformed children were born after longer non-pregnant intervals on an average than the normally developed children; and also that a large number of malformed children were born after non-pregnant intervals of more than four years. In the case of large families it was quite common to note an interval of two to three years between normal children, and then an interval of six to eight years before the birth of the malformed child, followed again by short intervals between subsequent normal children. In a previous observation of the "reproductive efficiency" of the parents prior to the birth of a malformed child, the author found a tendency in this period to frequent failure to produce full term, living and normal children.

These observations, the author concludes, tend to support a theory that mothers of congenitally malformed children "experience a more or less prolonged period of reproductive inefficiency" at the time that their deformed children are born.

#### COMMENT

*Those interested in eugenics will do well to follow Murphy and his methods. This article is the second along these lines and, if the data presented are not conclusive, they are certainly most interesting. We need more such workers to help clarify the existing "eugenic fog."*

H. B. M.

#### *Therapeutic Abortion by X-ray*

M. D. MAYER, WILLIAM HARRIS and SEYMOUR WIMPFHEIMER (*American Journal of Obstetrics and Gynecology*, 32:945-953, December, 1938) report the use of the X-ray for therapeutic abortion in 200 cases at Mt. Sinai Hospital, New York City, in the last ten years. The chief indications for abortion in these cases were chronic cardiac valvular disease, pulmonary tuberculosis and Graves' disease. The dosage was calculated to give 60 per cent of an erythema dose to the center of the uterus; as a rule two portals of entry were used, and two or three treatments on successive days were given. In the 200 cases treated by this method, all but 8 aborted dead fetuses; in 12 of the other cases the sac or the placenta was removed from the cervix or uterus without anesthesia. This would give 90 per cent completely successful abortions without any supplementary procedure. Many of these women had had previous surgical abortions, often with "stormy" convalescence. The majority aborted between the nineteenth and the thirty-fifth day after completion of the radiation; in 22 cases the abortion was completed with so few symptoms that the patient did not come to the hospital. In the remaining cases the average hospital stay was nine days, but this prolonged hospital stay was due to the general medical condition (on account of which abortion was necessary), not to any complication of the abortion *per se*. After irradiation for therapeutic abortion, patients must be kept under observation; if the fetus continues to grow, radiation may be repeated if the size of the uterus is not larger than a four months' pregnancy. Pregnancy must not be allowed to continue to term, because of

the danger of abnormality in the child. Amenorrhea follows the procedure, and usually slight menopausal symptoms, but in patients under twenty-five years of age, menstruation will return in almost all; in patients twenty-five to thirty years, in approximately 50 per cent; in patients over forty years amenorrhea has persisted in all. The authors do not advise subsequent pregnancies in these cases, even if the general condition improves, but they know of five such pregnancies resulting in apparently normal children. The method is advised especially for pregnancies of not more than fourteen weeks' duration in women who have serious disease which would make surgical intervention dangerous and who should not again become pregnant. It has "no mortality and remarkably low morbidity."

#### COMMENT

*Although good contraceptive information has recently become more widespread than ever before, there still occur many pregnancies that, perhaps, should have been avoided. Many of these will occur in very sick patients. Therefore any method that has no mortality and very little, if any, morbidity is to be commended. Therapeutic abortion by means of the x-rays is such a method. However, it is not by any means a universal method. It can only be used in those cases where castration is definitely indicated or in older women in whom castration makes no difference. Be sure to discuss the castration angle of the case with the patient before beginning treatment, otherwise you may awake some morning to find that you have a lawsuit on your hands. What a disconcerting feeling!*

H. B. M.

#### *The Cause and Treatment of Hyperemesis Gravidarum*

F. D. DRAŽANIĆ (*Zentralblatt für Gynäkologie* 60:2852-2859, Nov. 28, 1938) reports the treatment of hyperemesis gravidarum with injections of Witte's peptone. The injections are given daily intradermally in doses of 0.1 c.c. increasing to 0.3 c.c. The injections cause a reddening of the skin and infiltration of the subcutaneous tissue which disappear in forty-eight hours. The author has observed that the best therapeutic results are obtained in those cases showing the most marked local reaction. In all the cases treated, with

one exception, the peptone injections resulted in relief of the vomiting, so that the patient could eat normally and regain her strength. In most cases improvement was noted after the first few injections, followed by complete relief on continuing the treatment. In some cases as many as 20 peptone injections were given before recovery was complete. In the one case in which the peptone treatment was unsuccessful, it became necessary to empty the uterus, and a hydatid mole was found, although the clinical symptoms had not indicated its presence. The peptone injections are used on the basis that hyperemesis gravidarum is not a toxemia, but an allergic reaction to the products of the protein metabolism of fetus and placenta. The peptone acts, as in other allergic conditions, as a desensitization treatment. The failure of the peptone treatment in the case of hydatid mole is explained on the basis that the maternal organism was overwhelmed by the foreign proteins to such an extent that desensitization was ineffective.

#### COMMENT

Where there are a multiplicity of treatments for a given pathologic lesion there is no one which is entirely satisfactory. The treatment of hyperemesis gravidarum is no exception to this general proposition. With the injections of Witte's peptone your commentator has had no experience, but since the author of this paper has offered proof of its efficacy, we certainly intend to give it a "tryout."

H. B. M.

## Gynecology

### Hysterosalpingography

B. LUNDQVIST and G. RUNSTROM (*Acta obstetrica et gynecologica Scandinavica*, 16:415-475, 1936) report the use of hysterosalpingography in the examination of 55 patients. Stereoscopic radiograms were made after the injection of the lipiodol, at first with the patient in the dorsal decubitus, and later in other positions. Most of these patients were examined because of sterility. In 28 cases, in which the usual gynecological examination had shown no abnormality, the roentgenological findings with lipiodol were also normal; but in 12 cases in which the gynecological examination was negative, the roentgeno-

grams showed definite pathological changes—malformations of the uterus, intra-uterine polyps of the mucous membrane, or closure of the tubes at the abdominal ends. In 11 cases the history or gynecological examination indicated the presence of a chronic inflammatory condition or its sequelae, and in 9 of these cases the tubes were found to be closed. In the other 4 cases, the method was of definite value in diagnosis, especially in 2 cases of submucous myoma. In 16 cases which came to operation, the findings were confirmed in all but one. In 7 of the 28 cases of sterility in which the findings were normal, pregnancy followed the procedure of hysterosalpingography, showing that it has therapeutic as well as diagnostic value.

#### COMMENT

*Hysterosalpingography has established for itself a definite place in gynecology. However, do not forget that its use is not without danger, particularly in the chronic inflammatory group. It does not usually require hospitalization—a distinct advantage. It does relieve a certain proportion of sterility cases.*

Learn how to do it before you try it, otherwise you'll be surprised what you don't see.

H. B. M.

### Pelvic Temperatures Under Various Therapeutic Procedures

H. C. INGRAHAM (*American Journal of Obstetrics and Gynecology*, 32:1048-1049, December, 1936) reports that at the Lincoln Hospital, New York City, three methods of heat therapy have been employed in pelvic infections. These are diathermy, the Elliot treatment, and, in the past year, short wave radiotherapy. In order to determine the heat penetration obtained with the different methods, a silk bougie was passed through the cervix to the fundus of the uterus. The vaginal applicator for the treatment was then applied; and temperature readings were taken at intervals by means of introducing a thermocouple through the silk bougie that had been inserted. The treatment in each case was given for one hour. No patient was given more than one treatment daily, although all three methods were used for some patients. It was found that: The size and obesity of the patient had no apparent

effect on the degree of intra-uterine temperature obtained. The highest cervical temperature that could be comfortably tolerated by the patient was 110° F. This temperature could be obtained with the radiotherm in about five minutes and with diathermy in about ten minutes. With the Elliot treatment, the highest cervical temperature obtained was 109° F., and this was reached only in about half an hour. With all these methods of treatment, the intra-uterine temperature fell to the normal level in about five minutes after treatment was discontinued.

#### COMMENT

*Unquestionably heat properly delivered to the pelvis is of great value in pelvic infections. The gonococcus is particularly vulnerable to heat. How this elevated temperature is delivered does not seem to make much difference, although of late short wave radiotherapy "has the call" on this score. The indications are clear and the technic fairly easy to master. The "machinery" is rather expensive. However, don't get discouraged for you still can use the "5 gallon douche" extending over 1 or 2 hours time and get results in quite a few cases. In the "good old days" we have used the long hot douche and know what it will accomplish.*

H. B. M.

#### *Endometrial Histology and Pathology as Revealed by Biopsy*

R. E. CAMPBELL, F. C. LENDRUM and E. L. SEVRINGHAUS (*Surgery, Gynecology and Obstetrics*, 63:724-731, December, 1936) note that modern methods of obtaining biopsy specimens from the endometrium have made it possible to study the normal endometrial cycle as well as pathological changes. Their conclusions are based on the study of specimens from more than 500 endometrial biopsy specimens obtained with the punch instrument designed by Burch. The bleeding and tissue loss of normal menstruation is followed by re-epithelialization resulting in a thin endometrium with small straight non-secretory glands; this process is "independent of endocrine control." The next phase—the follicular or proliferative—is due to the action of the hormone of the newly developing graafian follicle, and characterized by cellular proliferation with numerous mitotic figures, especially in the glandular epithelium.

This is followed by the luteal or secretory phase which is characterized by changes in the glands, beginning at the necks of the glands and proceeding toward the deeper portions of the endometrium. The nuclei are elevated from the bases of the cells of the glandular epithelium, leaving a clear zone that, specific stains show, is filled with masses of glycogen. This is gradually secreted into the endometrial glands; mucin later appears in the lumen of the glands. The glands are enlarged and become coiled and tortuous; the coiling of the glands is most marked in the middle zone of the endometrium. The authors note that the endometrium in the fully developed stage of corpus luteum activity is sometimes diagnosed as "endometrial hyperplasia," but this histological picture is not to be regarded as pathological, but as a phase of the normal cycle. Pathologically there may be abnormalities of luteal function or abnormalities of follicular function. The most common type of the former is failure of ovulation and corpus luteum formation with absence of the typical luteal endometrium before the expected menstrual period. The authors have never observed evidence of excessively prolonged luteal activity although they consider it "theoretically possible." They also believe that an abnormal luteal secretion producing the so-called "mixed picture" in the endometrium is unusual; this diagnosis was considered possible in only 5 of over 500 cases, and then was doubtful. In the failure of corpus luteum formation, the follicular activity is also reduced, or absent (as in castration). If entirely absent, the endometrium is scanty, the stroma dense, the glands small and infrequent; in some cases of amenorrhea and often in the menopause, there is slight follicular activity with some thickening of the endometrium and more numerous glands. In other cases of amenorrhea and in cases of menorrhagia the endometrium resembles the fully developed follicular phase; bleeding occurs from this follicular type of endometrium and may resemble normal menstruation; in these cases there is usually more or less dilatation of the glands up to the typical "Swiss cheese" endometrium. The authors have found this latter type "rather rarely" and in their cases it has been no more characteristic of menorrhagia than of amenorrhea. They emphasize the point that the endometrial

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# Medical Book News

All books for review and communications concerning Book News should be addressed to the Editor of this department, 1313 Bedford Avenue, Brooklyn, New York.

Edited by TASKER HOWARD, M.D.



## CLASSICAL QUOTATIONS

"Your patient is ready, Sir".

- Dr. William Thomas Green Morton to Dr. J. C. Warren, reporting successful etherization at the first public demonstration of surgical anesthesia, Boston, October 16, 1846, as reported in the "Semi-Centennial of Anesthesia," Boston, 1896.

### For The Bronchoscopist

DISEASES OF THE AIR AND FOOD PASSAGES OF FOREIGN-BODY ORIGIN. By Chevalier Jackson, M.D. & Chevalier, L. Jackson, M.D. Philadelphia, W. B. Saunders Company, [c. 1936]. 636 pages, illustrated. 4to. Cloth. \$12.50.

This book is a comprehensive review of the authors' foreign-body work and is divided into two sections. Section 1 is devoted to the pathology, symptomatology and treatment of foreign bodies in general. The fundamentals of endoscopy are omitted, but more common mechanical problems are described, with detailed explanations, as to proper procedures in each. Section 2 is a classified tabulation of about twenty-five hundred cases, each illustrated, and with comments as to the problems presented, difficulties to be overcome and unusual facts noted. The book summarizes the authors' experience in all the details in this field and is profusely illustrated both by reproductions of X-ray films and by original drawings. Three plates, in color, illustrating endoscopic views, add greatly to the work.

This volume is probably the most valuable of any that the authors have published. It is indispensable to the expert, for it furnishes a ready reference to almost any foreign-body problem. To the beginner it is a practical guide with such a wealth of detailed description as to be almost invaluable. It deserves the most careful consideration of all interested in foreign-body work.

ROBERT L. MOORHEAD.

A Well-Known Work Brought Up to Date  
AN INDEX OF TREATMENT BY VARIOUS WRITERS. Edited by Robert Hutchison, M.D. Eleventh edition, revised. Baltimore, William Wood and Company, [c. 1936]. 1020 pages, illustrated. 4to. Cloth, \$12.00.

This well known book, the work of many leading English writers, is continued in its usual form of an encyclopedic index of treatment. The whole has been revised and some of the articles re-written, among them those on Acromegaly, Addison's Disease, Eclampsia, Goitre, Pulmonary Tuberculosis and Raynaud's Disease. There are new presentations on Agranulocytosis, Allergic Diseases, Alkalosis, Cisternal Puncture, Anemias of Childhood and others.

This is a standard English work which has made a place for itself. Some of the prescriptions recommended contain a larger number of ingredients than usual, following an older style in this regard.

W. E. MCCOLLOM.

### On the Development of the Nervous System

NEUROEMBRYOLOGY. An Experimental Study. By Samuel R. Detwiler. New York, Macmillan Company, [c. 1936]. 213 pages, illustrated. 8vo. Cloth, \$3.75. (Experimental Biology Monographs).

This monograph is a critical survey of observations that have been made following experimental surgery on the embryo (Urodelia). This method of study, although in its infancy, has expelled many hypothetical explanations concerning forces that are responsible for the correlative development of form and function in the nervous system. Harrison's contribution to the study of neurogenesis has been cited by the author as an example. This

investigator conclusively proved that the nerve fiber represented a protoplasmic outgrowth from the cell, and thereby terminated an important controversy in biology.

Dr. Detwiler presents a most interesting series of observations following the explantation of limb buds, nasal placodes, eyes, etc., in the embryo. Many highly significant facts have been discovered which aid in clarifying the relative importance of chemical, electrical and mechanical agents in the development of the nervous system.

JEFFERSON BROWDER.

#### *MacCallum's Latest Pathology*

A TEXT-BOOK OF PATHOLOGY. By W. G. MacCallum. Sixth edition, entirely reset. Philadelphia, W. B. Saunders Company, [c. 1936]. 1277 pages, illustrated. 8vo. Cloth, \$10.00.

The plan of organization of this 6th edition does not differ materially from previous ones. It has been completely reset. Practically all sections have been amplified. The discussion of pathological changes, together with clinical manifestations, is impressive and instructive. Illustrations picture various lesions abundantly, and are of exceptionally clear and brilliant workmanship. The author is naturally rather noncommittal on certain subjects, such as nephrosis, and Banti's disease for example, including them, perhaps, for convenience sake. This is also exemplified in the discussion on the transmission of tetanus antitoxin. The reviewer enjoyed reading this book, the style of writing is engaging and interesting. It is recommended as a valuable addition to any medical library, and especially to the undergraduate student in medicine.

MAX LEDERER.

#### *A New Edition of Homans*

A TEXTBOOK OF SURGERY. By John Homans, M.D. Fourth edition. Springfield, Charles C. Thomas, [c. 1936]. 1267 pages, illustrated. 4to. Cloth, \$8.00.

In this edition, a chapter on amputations and plastic surgery, which seemed too technical for previous ones, has been incorporated. The principles of this branch of surgery are emphasized and indications for various types of operations in the presence of different diseases are discussed. The remainder of the book has been revised with the definite idea in mind of replacing old material with new and with actually little added. Accordingly the pagination is unchanged and the size

of the book kept within its original limitations. Thus the excellence of the previous editions has been retained. This text book of surgery which has from the time of the first edition, retained many new ideas, is recommended particularly for the undergraduate but is also useful for the graduate student of surgery.

EMIL GOETSCH.

#### *Americana*

THE AMERICAN MEDICAL PROFESSION 1783 TO 1850. By Henry B. Shafer, Ph.D. New York, Columbia University Press, [c. 1936]. 271 pages. 8vo. Cloth, \$3.25.

Dr. H. B. Shafer furnishes us with the first complete and detailed account of the status of the medical profession during its evolutionary period from the apprentice system to the more modern scientific method. The physician in the beginning of this period was poorly educated, his cultural background was very deficient. Medical education with its low standard, short term, poor educational facilities, and lack of practical application was not conducive to higher scientific achievements. Medical colleges depended totally on the fees derived from students. This unhealthy condition produced competition among colleges, continuous quarreling among members of the faculty, and marked favoritism to the student body. Due credit should be given to the University of Michigan for having instituted payment of salaries to professors by the University.

Medical ethics were not observed. There was no national organization strong enough to enforce its rulings to protect physicians against any breach of ethics. Income of the general practitioner was very meagre. Fees were small, mostly due to family contract practice and to overcrowding of the profession.

The social position of the physician did not reach a very high level. Constant wrangling among the élite of the profession and the prevalence of numerous cults did not add to the prestige of the physician.

Dr. Shafer has written a complete and unbiased, an accurate and painstaking presentation of the early period of American medicine. Medical discoveries of the same period are very few and have been carefully covered by the author.

It is, however, to be regretted that certain outstanding figures during this period were perhaps inadvertently omitted. Such

are Dr. John C. Otto who in 1803 wrote the first modern description of hemophilia, Dr. John L. Richmond who in 1827 performed the first Caesarean operation in America; Dr. Samuel G. Howe who founded in 1831 the first school for the Blind; and Dr. Gerhard who was the first to differentiate between typhus and typhoid in 1839.

The book should be on the shelf of every physician interested in historical medicine.

WILLIAM RACHLIN.

#### Nursing the Insane

MENTAL NURSING SIMPLIFIED. By O. P. Napier Pearn, M.R.C.S. Second edition. Baltimore, William Wood and Company, [c. 1936]. 328 pages, illustrated. 16mo. Cloth, \$2.00.

This pocket size book of 328 pages is intended for mental nurses, but should be useful to any one charged with nursing care of the sick.

There are a few suggestions on how to study, then are taken up in sequence: duties of the nurse, consideration of some essentials of anatomy, physiology and hygiene, first aid in emergencies, and needs of the sick in general. Then is a brief résumé of the structure of the nervous system, normal and abnormal psychology, leading up to the care of mental patients. Many helpful suggestions are made and the reader should, with collateral reading, acquire a better knowledge of the patient so that she can minister to him more intelligently.

The two last chapters on examinations aid the student nurse in correlating and expressing her ideas.

A. E. SOPER.

#### Latest Edition of Stedman

A PRACTICAL MEDICAL DICTIONARY. By Thomas Lathrop Stedman, M.D. Thirteenth, revised edition with the new British Anatomical Nomenclature. Baltimore, William Wood and Company, [c. 1936]. 1291 pages, illustrated. 8vo. Cloth, \$7.00; \$7.50 with thumb index.

This, the thirteenth edition, revised, of Stedman's standard dictionary, marks the twenty-fifth anniversary of a notable work's birth. It takes into account all the recent changes in the Pharmacopeia and National Formulary and an appendix carries the Basle Anatomical Nomenclature with its British revision, as it was deemed inadvisable to incorporate the new terms in the body of this dictionary. There is a host of other useful features.

Dictionary making is not wholly a matter of adding new words. Words are also permitted to die. Some that ought to die

have great tenacity of life and linger on unseemly and obscene. An example of such a word is coction, just executed by Dr. Stedman. The dictionaries have carried it down to date. It was indispensable to the older physiologists, beginning with Galen. Incidentally, we wonder just what the word death rate is. There's a job for some zealous statistician. Personally, we should like to see the rate stepped up.

In a work marked by such a high order of scholarship one is made curious by the carrying over from one edition to another of the following remark with respect to the word endameba: A genus of amebas not parasitic in the human; sometimes incorrectly used for Entameba. And so one finds the familiar *Endameba histolytica* listed by Stedman as *Entameba histolytica*. On this point Craig, in his *Parasitic Protozoa of Man* (1926, p. 18), says that an error was first made by Casagrandi and Barbagallo (1895), who, in ignorance of Leidy's genus *Endameba*, proposed the name *Entameba* for a new genus in which *Entameba coli* was selected as the type species. This error was repeated again in 1903, by Schaudinn, who accepted Casagrandi and Barbagallo's name, and included in this genus both *coli* and *histolytica*. Craig says that all of these amebas belong in the genus *Endameba* and that we should drop the name *Entameba* entirely from use as a generic name.

The publishers have placed the winged staff of Mercury with its two twined serpents upon the paper jacket of this book as the symbol of the medical profession, instead of the proper symbol, an unwinged rod with only one serpent encircling it. Under the word caduceus Dr. Stedman accepts the former as the proper symbol and then disavows it at the end of his definition. All of which leaves one a bit muddled.

ARTHUR C. JACOBSON.

#### A Good Diabetic Manual

A DIABETIC MANUAL FOR PRACTITIONERS AND PATIENTS. By Edward L. Bortz, M.D. Philadelphia, F. A. Davis Co., [c. 1936]. 222 pages, illustrated. 8vo. Cloth, \$2.00.

A simple, well written manual for the diabetic patient has been added to the already large list of books which fill the same need. Dr. Bortz has described the history, symptoms, signs and complications of diabetes. He has also engaged the services of his associated group to treat the

subjects of juvenile diabetes, diabetic surgery, care of the feet and teeth. A comprehensive list of food tables with the author's method of diet writing closes the book. Dr. Bortz has added many practical hints from his practice to guide the patient and make his management easier and livable.

WILLIAM S. COLLENS.

*Cabot's Urology Reissued*

MODERN UROLOGY IN ORIGINAL CONTRIBUTIONS BY AMERICAN AUTHORS. Edited by Hugh Cabot, M.D. Third edition, two volumes. Philadelphia, Lea & Febiger, [c. 1936]. Illustrated. 8vo. Cloth, \$20.00.

Cabot's Modern Urology has been a standard work since its first publication twenty years ago. This new edition, the third after a lapse of 12 years, is a welcome addition to urological literature.

Because of the fact that so many advances have been made in the last decade, many chapters have been entirely rewritten, in several instances by different authors, and entirely new chapters have been added.

The editor has shown excellent judgment in his selection of contributors and his assignment of subjects. In every instance each contributor is particularly well qualified to write authoritatively on the subject assigned to him.

Every phase of urological science is covered concisely and clearly; the embryology and anatomy briefly but satisfactorily, other phases in logical sequence—etiology, symptoms, prognosis, diagnosis, differential diagnosis and with special stress laid upon treatment both nonoperative and operative. It is an extremely practical work.

The illustrations are numerous and particularly well done. Many of them are original and others are borrowed from standard works.

The bibliography and index are excellent. This reviewer wishes to extend congratulations to Dr. Cabot and his many contributors on an excellent piece of work. No urologist's library is complete without it.

N. P. RATHBUN.

*A New Edition of Christopher*

MINOR SURGERY. By Frederick Christopher, M.D. Third edition, reset. Philadelphia, W. B. Saunders Company, [c. 1936]. 1030 pages, illustrated. 8vo. Cloth, \$10.00.

This is the third edition of a work that is already well known to the medical pro-

fession and is well up to the standard established by previous editions. Dr. Christopher has taken advantage of advances in minor surgery and has brought this edition up to date including new material such as, bacteriophage, X-ray treatment of gas gangrene, bismuth injection treatment of warts, sodium morrhuate in cystic hygroma, Elliott treatment of pelvic inflammatory disease, Wangensteen stomach suction apparatus, etc.

There are 988 pages of text with 709 illustrations, some being photographs others black and white drawings. The various techniques and pathological conditions are exceedingly well illustrated, making the volume a practical ready reference book for the busy surgeon's desk.

Very little has been left out of this volume. There might possibly have been added peripheral nerve injection and section as a treatment for perivasculitis diseases. However, this procedure, as well as many others, will be included in the next edition, no doubt, for the reviewer personally hopes that Dr. Christopher will continue to supply our need for an excellent textbook on minor surgery. We believe this book should be a part of the library of every surgical interne.

HERBERT T. WIKLE.

*A New Manual on Urology*

A HANDBOOK OF UROLOGY FOR STUDENTS AND PRACTITIONERS. By Vernon Pennell, F.R.C.S. New York, Macmillan Company, [c. 1936]. 224 pages, illustrated. 12mo. Cloth, \$2.25.

The author contributes a well written brief compendium on urological conditions excluding venereal disease. It is intended chiefly to guide the medical student whose curriculum of the present day is so crowded with subjects and courses. It is difficult for a urologist to muster any enthusiasm over this type of publication. As far as general practitioners are concerned, we believe that the standard textbook serves a much more valuable and useful purpose.

The reviewer takes issue with the author in extolling the advantages of intravenous urography in comparison with the value of retrograde pyelography.

Perhaps the book will be of material assistance in aiding the student to acquire some grasp of the specialty and in passing examinations.

AUGUSTUS HARRIS.

### *Introduction to Neurology*

A PREFACE TO NERVOUS DISEASE. By Stanley Cobb, M.D. Baltimore, William Wood & Company, [c. 1936]. 173 pages, illustrated. Svo. Cloth, \$2.50.

This book is based on an experience of fourteen years as lecturer to second year students in neuropathology. Its aim is to introduce the student to basic principles in anatomy, physiology and pathology of the nervous system. It is a valuable book, written in simple style, and supplies a much needed work to gain the interest of medical students in neuropathology. The subject is treated in an interesting manner, and the student is lead to grasp the significance of underlying pathological as well as physiological changes that occur in various neurological diseases. It is a stimulating little volume, and is highly recommended for all who are interested in neurology and allied conditions.

IRVING J. SANDS.

### *Cosmetizing the Cosmetologist*

ESSENTIALS OF COSMETOLOGY. A handbook of concise and practical information for all who are interested in the maintenance or enhancement of the healthy appearance and natural beauty of the body. By H. O. Bames, M.D., Los Angeles, H. O. Bames, M.D., [c. 1936]. 98 pages. Svo. Cloth.

In the opening chapter of the book, labeled "Foreword," Dr. Sven Lokrantz writes that Cosmetology is a profession. He says that "Those heretofore practicing the art and trade of hairdressing etc., found themselves well qualified in a practical way, but where were they to turn for scientific information. . . .?" In the next chapter labeled "Introduction," Dr. Bames says "that the seeker of Cosmetic or Esthetic improvement, at present, comes to the Cosmetician rather than to the Physician for advice" on such subjects.

This book, therefore, is apparently written for the purpose of giving such scientific information to enable the "Cosmetologist" to handle "her clientele."

When one examines this little volume of 98 pages for any scientific information, he is very much disappointed. Statements are made that are not only incomplete, but are not according to the established conceptions on these questions. For example, "Liver spots" (Chloasma) are due "to insufficient action of certain internal glands, chiefly the liver." "Yellow Tumor (Xanthoma) is an accumulation of yellowish pigment lutein within the cells." A vesicle

is a nodule full of fluid, and a wheal is a nodule distended with lymph, etc. etc.

The information one gathers from this book is, in general, not only very mediocre and extremely simple, but also very crude and distorted.

ABRAHAM WALZER.

### *An Important Psychiatric Study*

RESEARCH IN DEMENTIA PRECOX. (Past Attainments, Present Trends and Future Possibilities). By Nolan D. C. Lewis, M.D. New York, The National Committee for Mental Hygiene, [c. 1936]. 320 pages. Svo. Cloth, \$1.50.

This volume represents the first organized attack on dementia precox in medical history. It is significant that a lay organization made the publication of this work possible, for it indicates the awakening of society as a whole to the importance of this problem. The author, Dr. Lewis, newly appointed director of the New York State Psychiatric Institute, is eminently qualified to present this comprehensive picture of what is being done in the whole field of dementia precox research. Moreover, not only does he do this very adequately, but, with a breadth of vision, points the way that every investigator in this field must take if the tremendous problem of dementia precox is to be attacked intelligently.

An adequate bibliography is appended in a convenient arrangement. The format and type make reading this book a pleasure.

JOSEPH L. ABRAMSON.

### *For Parents*

SO YOU'RE GOING TO A PSYCHIATRIST. By Elizabeth I. Adamson, M.D. New York, Thomas Y. Crowell Company, [c. 1936]. 263 pages. Svo. Cloth, \$2.50.

The author attempts to explain modern psychiatric thought particularly in its relationship to behavior disorders of children. Her point of view is based essentially on the teachings of Freud. There are chapters devoted to the explanation of psychoanalytical terminology, such as, the Id, Super-ego and Ego, repression, projection and other mechanisms. There are also chapters on the neuroses and sexual development.

But the work is far from being a psychiatric text. Case demonstrations are utilized to show how a diagnosis is made, and what conclusions may be drawn. There is marked emphasis placed on the first five years of childhood in the development of the personality of the future adult. The

author points to the maladjustment of parents as the cause of most behavior problems. By gaining an insight into the whys of their own difficulties, they may avoid similar pitfalls in the development of their children.

This work is not too technical, and yet avoidance of oversimplification permits it to be read with interest by the general practitioner and pediatrician. However, they should bear in mind that there are other methods of approach to the problems of childhood and adult life beside the psychoanalytical.

STANLEY S. LAMM.

#### *Textbook on Biology Revised*

FOUNDATIONS OF BIOLOGY. By Lorande Loss Woodruff. Fifth edition. New York, The Macmillan Company [c. 1936]. 583 pages, illustrated. 8vo. Cloth, \$3.50.

The fifth edition of this well known

work, thoroughly revised and brought up to date, needs no special brief to commend it. It is a book of 583 pages, 26 chapters, an appendix, in which are found a classification of plants and animals, glossary and index. There are 377 illustrations. It covers the entire range of biology in its modern aspects, as well as much that is historically interesting. The author writes with clarity and exactness. One is much impressed with the amount of labor involved in a work such as this, where precision means everything. Prof. Woodruff has not only produced a fine textbook, but something which is invaluable as a background for the modern physician. To thoroughly know such a work is of priceless value to him who would adequately grasp the relationship of environment and organic life to health and disease.

J. M. VAN COTT.

## BOOKS RECEIVED

Books received for review are acknowledged promptly in this column; we assume no other obligation in return for the courtesy of those sending us the same. In most cases, review notes will be promptly published shortly after acknowledgment of receipt has been made in this column.

THE PRINCIPLES OF BACTERIOLOGY AND IMMUNITY. By W. W. C. Topley, M.D., and G. S. Wilson, M.D. Second edition. Baltimore, William Wood & Company [c. 1936]. 1645 pages, illustrated. 4to. Cloth, \$12.00.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, etc. Edited by Louis Hamman, M.D. Volume 4, 46th Series, 1936. Philadelphia, J. B. Lippincott Company [c. 1936]. 352 pages, illustrated. 8vo. Cloth, \$3.00.

LECTURES ON EMBOLISM AND OTHER SURGICAL SUBJECTS. By Gunnar Nystrom, M.D. The Abraham Flexner Lectures, Series Number Four. Baltimore, The Williams & Wilkins Company [c. 1936]. 213 pages, illustrated. 8vo. Cloth, \$3.00.

THE MEDICAL RECORD VISITING LIST OR PHYSICIANS' DIARY FOR 1937. Revised. Baltimore, William Wood & Company [c. 1936]. 16mo. Flexible Cloth.

UROLOGY FOR NURSES. By Oswald S. Lowley, M.D., and Thomas J. Kirwin, M.D. Philadelphia, J. B. Lippincott Company [c. 1936]. 493 pages, illustrated. 8vo. Cloth, \$3.00.

ESTUDIO FUNCIONAL DEL HIGADO AFECTADO POR EL ESTANCIAMIENTO SAN-GUINEO EN LAS CARDIOPATIAS. By Severo R. Amuchastegui, M.D. Cordoba, Imprenta de la Universidad Nacional [c. 1936]. 166 pages, illustrated. 8vo. Paper.

CLINICAL PSYCHOLOGY. A Handbook of Children's Behavior Problems. By C. M. Louttit.

New York, Harper & Brothers [c. 1936]. 695 pages, illustrated. 8vo. Cloth, \$3.50.

THE SURGICAL TECHNIC OF ABDOMINAL OPERATIONS. By Julius L. Spivack, M.D. Chicago, S. B. Debourg [c. 1936]. 718 pages, illustrated. 4to. Cloth, \$10.00.

THE 1936 YEAR BOOK OF THE EYE, EAR, NOSE AND THROAT. The Eye, by E. V. L. Brown, M.D., and Louis Bothman, M.D.; the Ear, Nose and Throat, by George E. Shambaugh, M.D., Elmer W. Hagens, M.D., and George E. Shambaugh, Jr., M.D. Chicago, The Year Book Publishers, Inc. [c. 1936]. 632 pages, illustrated. 12mo. Cloth, \$2.50.

VEGETARISCHE FÜR ALLE NEUZEITLICHE KÜCHE EINSCHL. ROHKOST UND KRANKENDIAT. By Frieda Rausch. München, Otto Gmelin [c. 1937]. 92 pages. 8vo. Cloth, RM. 1.58.

DAS GESCHLECHTSLEBEN SEINE BEDEUTUNG FÜR INDIVIDUUM UND GEMEINSCHAFT. By Carl S. Csallner. München, Otto Gmelin [c. 1937]. 81 pages. 8vo. Paper, RM. 1.58.

ORTHOPADISCHE FUSSGYMNASTIK EIN BEITRAG ZUR BEHANDLUNG DES JUGENDLICHEN KNICK-BZW. KNICKSENKFUSSES. 3 Aufl. By R. Wilhelm. München, Otto Gmelin [c. 1936]. 32 pages, illustrated. 8vo. Paper, RM. 1.35.

A MANUAL OF PHARMACOLOGY. By the late Walter E. Dixon, M.D. Revised by W. A. M. Smart, M.B. Eighth edition. Baltimore, William Wood & Co. [c. 1936]. 483 pages, illustrated. 8vo. Cloth, \$6.50.

## NEUROCIRCULATORY ASTHENIA IN THE AGED

—Malford W. Thewlis, M.D.

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7. Condition may follow infections, operations, and worries, and there is probably a hereditary background.
8. There may be a "functional" heart murmur.
9. Blood pressure is apt to be low.
10. Must be differentiated from hyperthyroidism, angina pectoris and coronary thrombosis in older patients.
11. Mild cases are difficult to diagnose.
12. Treatment consists of a thorough physical examination, rest periods, work and exercise and reassurance. Phenobarbital, bromides or ephedrine best drugs.

### References

- 1 Edwards, J. C., and White, Paul D.; *New Eng. Jour. Med.*, 211:54, July 12, 1934.
- 2 Craig, H. R., and White, P. D.; *Arch. Int. Med.*, 53:638, May, 1934.
- 3 White, P. D., and Hahn, R. G.; *Am. Jour. Med. Sc.*, 177:179, 1929.
- 4 Thewlis, M. W.; *Med. Times*, 64:67, March, 1936.
- 5 Bueermann, W. H.; *Northwest Medicine*, 32:364, September, 1933.
- 6 Prioleau, W. H.; *Southern Med. & Surgery*, 95:432, August, 1933.
- 7 Essenson, S. J.; *Med. Record*, 141:205, 1935.

## THERAPEUTIC USE OF HELIUM

ALVAN L. BARACH, New York (*Journal A. M. A.*, Oct. 17, 1936), states that because of the low density of helium, a respirable mixture of helium with oxygen requires considerably less effort to breathe than air or oxygen in patients suffering from obstructive dyspnea. There were eighteen cases of severe asthma and twenty-one cases of obstruction in the upper air passages in this series. In status asthmaticus the treatment may result in the saving of life, five cases in the series seemingly being in this group; in severe, more or less continuous asthma, in amelioration of the disease with recovery of complete sensitiveness to epinephrine in patients who previously had become refractory to it, as occurred in ten additional cases. In obstruction of the pulmonary airway from the bronchiole to the pharynx, inhalation of helium with oxygen lessens

## Contemporary Progress

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histology may be the same in amenorrhea, cyclic follicular bleeding and menorrhagia of the endocrine type, so that endometrial biopsy, although of definite value in diagnosis, is "not yet an adequate substitute for a good clinical history." They also note that biopsy is not a substitute for curettage when neoplasm is suspected, as the biopsy punch may miss a small area of carcinoma. The biopsy method is of special value as "a control for endocrine diagnosis and therapy."

### COMMENT

*Endometrial biopsy, using the punch method, is of special value as "a control for endocrine diagnosis and therapy." Of this there can be no doubt. However, such pictures do not give us the whole story. Never forget that a good clinical history with a keen practical clinician to interpret it is of inestimable value. Furthermore, if malignancy be present the "punch" may miss it, a very serious misdemeanor. Nothing less than thorough curettage is justifiable where there is the least suspicion of malignancy. And remember! Cancer is no respecter of age.*

H.B.M.

the respiratory effort and aids ventilation of the lungs, in some instances thereby averting tracheotomy; five patients in this series recovered without tracheotomy. In patients in whom the obstruction is below the trachea, dyspnea may be relieved when tracheotomy itself would be unavailing. The usefulness of helium with oxygen in emphysema, associated with bronchiectasis or fibrosis or both, is compared to the procedure when oxygen treatment alone is employed. Smaller concentrations of oxygen may produce similar restoration of pulmonary function when helium is used as the diluent of oxygen instead of nitrogen. The clinical reaction to inhalation of helium with oxygen may be used as a diagnostic procedure to determine the presence or absence of obstruction in the pulmonary airway and associated pulmonary functions.

## Economics

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countries to illustrate the contrast between panel practice on the one hand and private medical practice on the other. The test is

absolutely fair and reveals the superiority of health conditions in this country for a large majority of the wage earning element, a large proportion of which receives medical treatment free of charge. To impose a system of health insurance upon our wage earners would merely diminish their income and reduce their surplus which otherwise would go toward maintaining the American standard of life.

## News and Notes

### FIRST INTERNATIONAL CONFERENCE ON FEVER THERAPY

*To Be Held at College of Physicians and Surgeons of Columbia University, New York City, on March 29th, 30th, and 31st, 1937*

BARON HENRI DE ROTHSCHILD, Chairman,  
Paris, France

DR. WILLIAM BIERNAN, Secretary  
471 Park Avenue  
New York City, U.S.A.

THE First International Conference on Fever Therapy will hold its sessions on March 29th, 30th, and 31st, 1937, at the College of Physicians and Surgeons, Columbia University, New York City. The first day will be devoted to the discussion of physiology, pathology, and methods of production of fever. Dr. Frank W. Hartman, Henry Ford Hospital, Detroit, Michigan, is Chairman of the Committee arranging this section of the program, and Dr. Charles A. Doan of Ohio State University is Secretary.

The second day is to be spent in the consideration of miscellaneous diseases treated by fever, such as chorea, rheumatic carditis, ocular diseases, arthritis, leprosy, meningococcus infections, undulant fever, tuberculosis, tumors, skin diseases, etc. This session will be arranged by Dr. Clarence A. Neymann, 104 South Michigan Boulevard, Chicago, Illinois, with the assistance of Dr. Frank H. Krusen, Mayo Clinic, Rochester, Minnesota, as Secretary.

The morning of the third day is to be devoted to the consideration of syphilis.

Dr. Walter M. Simpson, Miami Valley Hospital, Dayton, Ohio, is Chairman of this section, which has as its Secretary Dr. Leland E. Hinsie, New York State Psychiatric Institute, New York City. In the afternoon of the same day, the treatment of gonorrhea by fever is to be discussed under the chairmanship of Dr. Stafford L. Warren, Strong Memorial Hospital, University of Rochester, Rochester, New York. The Secretary of this committee is Dr. Charles M. Carpenter, Rochester, New York.

Ministries of Health from many countries have indicated their intention to send official representatives to the Conference.

The official language of the Conference is to be English.

Baron Henri de Rothschild of Paris is General Chairman of the International Conference on Fever Therapy. Dr. Walter M. Simpson, Dayton, Ohio, is Chairman of the American Committee.

All who plan to attend the Conference are urged to register promptly with the General Secretary, Dr. William Bierman, 471 Park Avenue, New York City. The registration fee is \$15.00.

### ADRENAL VIRILISM

WILLIAM SAPHIR and MORRIS L. PARKER, Chicago (*Journal A. M. A.*, Oct. 17, 1936), state that adrenal virilism is the clinical manifestation of hyperactivity of the adrenal cortex gland. In a case of adrenal virilism the adrenals appeared to be normal, but aberrant adrenal cortex tissue was found within the ovary. Increased function of adrenal cortex seems associated with increased excretion of estrogenic substance. The clinical and physiologic manifestations of adrenal virilism may be explained on the basis of the embryologic origin of adrenal cortex.